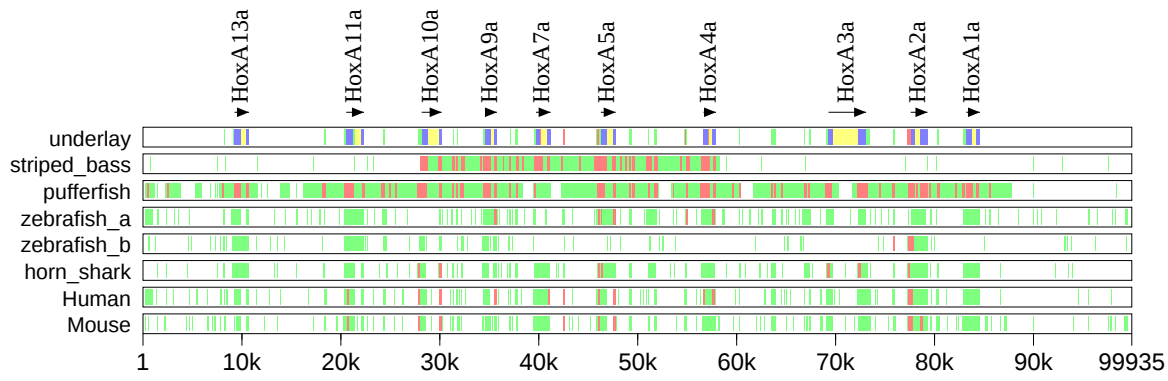




10	20	30	40	50	
1:	TCAGTTGACAGAATAGCTGTATAGCACCGACTGCAGCTGCAGTCTTTGAA				tilapia
60	70	80	90	100	
51:	CCTGAAGCAGACCCTGGATCTGTTTCATTGAGCATAAATATTACATTTTC				tilapia
6596:				GG.	zebrafish_b
110	120	130	140	150	
101:	TGTTCCACCCTACAGTGCCAAATATGTTTATTGCTTTTTGCCTTTCCTTCG				tilapia
6603:	..A.T...ATC.TGC...A...C...GAC.....A...T.C..A				zebrafish_b
160	170	180	190	200	
151:	TACAAGCATGCAATCCAACCTGCACCCACACAGCCTACCTTTAGCTGTTG				tilapia
6982:			..C.....A...C.		pufferfish
14679:			GTC.GT...		zebrafish_a
6652:	.				zebrafish_b
210	220	230	240	250	
201:	GGTAGTCCATGCTTTCAGGCGTGCAGCTGACATCAATTTCTCATAGAAG				tilapia
6999:	A.....T..G.....				pufferfish
14694:	.A..A.....T..A..A.....T.....A.G.				zebrafish_a
12567:	..C..G.....C..C..G.....T.....A				Human
260	270	284	294		
251:	TCCGACTCTGTGTCTGAGCTGCTG-----CCGTCTTTGTGGTGATGGTC				tilapia
7049:	GT.T.....C.....				pufferfish
14744:	..T..T..C.CA.....A-----G.....TAG.GAT...				zebrafish_a
12603:	G.....C.....A...GGTTGC..C.G.CC.GA.A.GCT...				Human
2567:			.A...GA.TC.		Mouse
295	305	323	333		
295:	-----ACCCTGGTGCCTCTCTCCGG--AGGTAGACGTGCCAACCAG				tilapia
7093:	-----GA.C.....A....A..GG.....GTG.GA				pufferfish
14788:	-----TGA.A....A.G....CA...A..G.T...T.GAA..				zebrafish_a
12653:	GACTGAGGGGG..G..G.T.CTGGG...A--GCA.G.C..CC...G.T.C				Human
2578:	-----G...C.....A.....				Mouse
343	353	363			
334:	CCTCGCGTCGCGCTCATATTTCTCCGTGCGCTATC-----				tilapia
7132:	A.C...CT..A..G....G....C.T...C..-----				pufferfish
14827:	TG.TA.A..----TC.G..C..TG.AC.A..G.G..-----CTTTTG				zebrafish_a
12701:	.TGG.GC.....C.GG---C.C.GCC....GC.TGCGAGTCCATCTA				Human
375	385	395	406		
370:	----CTCCGCTGCTAGGTCGCTCCTGTGCGCG-----GGAATAGGGT				tilapia
7168:	----G...ATCA.C..C..TGC.....C.T-----G..T.A-				pufferfish
14865:	TCGCG..AT.CA..GA.CTT-----T-----C....A..-				zebrafish_a
12748:	CCGG....T.CT.CG..C.T.C..C.C...CTCCCGGT..CCGGA..G				Human
416	426	436	446	456	
407:	GCAGCTCCTGGGCTCAGACAACCTCTGTGGCCCGGCTTGCTGGTGGTTC				tilapia
7204:	-----AT.C.....G..G.TC..C....T.A....C..CT.....				pufferfish
14896:	-----CAAG..A..G..T.TGTTCTG.GTAAT...T...T.C...A.C.T				zebrafish_a
12798:	A.G..C.GA.....G.....A.G.G.CA..ATT..CT.G..C..C..				Human

466	476	486	496	
457:	TCGCACGGGGCTCCCGATGGCTTCCGACAAATTAGAGCCGCTCT-----	tilapia		
7249:	C.....G..A....T.....T.....C.....	pufferfish		
14941:	G....G....TCT..AGGA.....T.....G.T.TGGCAG	zebrafish_a		
12848:	CG...GC.....G..C.C.....G.....T...A.T...TGCCAA	Human		
504	514	524	534	544
501:	-----TGCCAAAGCTGACCTCCCTCTGCCAGCATCACCATCTCCTCTCTG	tilapia		
7293:	-----GCT.C....G....A.T..CA.....T.....	pufferfish		
14991:	AAAGTG.....CT....TA..T..G..GC.....TT..T...TAGCA	zebrafish_a		
14913:	TT...A.A	zebrafish_b		
12898:	CCAGAG.....C..A..CAGA.A..C	Human		
2162:	...T.A..T.....	Human		
554	564	575	585	
545:	CTTTCCATCACAAGCACGAC-----TT-----AAAAGAAAAAACAAAACAA	tilapia		
7337:	G.....G....CTTT..	pufferfish		
12898:	A.....A....A..	pufferfish		
15041:	..G.....A..CG-----G.C..G.GT.G.GGG.C.	zebrafish_a		
13098:	T..A.....A....A..	zebrafish_b		
14922:	T.G.TT.G.GTG.TT...TT-----	zebrafish_b		
2178:	ACC....C.C.CT...AA.-----AG-----	Human		
5168:	...G..A.-----GCAAA....A.....A....A..	Mouse		
601	611	621		
586:	AACAAGCA-----AACCTCGACTTCGTGGCGAAACGTCCAA	tilapia		
7374:	.GTTC...GA.A...C...GC....AG.	pufferfish		
12917:	..A.....	pufferfish		
15075:	G.TC.C.C-----	zebrafish_a		
13116:	..A..A.TCAAACCGCATTCTGTTATA.A.GC.T..A.-T...T..T..T	zebrafish_b		
12980:	GGA....CCCAAGTGAGTTCCT....C..G..C.C...-----TCC	Human		
5203:	..A..	Mouse		
631	641	651	661	665
622:	ACCAAGGAGATGAATCTCACGTTGGAGGGGTGTGCGCGTGT-----GTG	tilapia		
7401:	...C..AC...TTTGT...G.A.....T.AA.A-----	pufferfish		
15085:	-----A.	zebrafish_a		
13165:	G.TT.CTT.....AAC.TT...A..A...	zebrafish_b		
13024:	.G.GGCCG..C.G....T-G....C.A.A.G.A.AAA.AAAGGCCGG...	Human		
675	685	695	705	715
666:	CGTGCAGCGGGGATGTCGGTGGGTGGGAGATTGCGTCCTAAAAGAGAAGG	tilapia		
7444:	.C...-...ATA...GA..C.....G.CGA...C---.GG.....	pufferfish		
15087:	.T.-----TA.GA.TT.T-----C..C	zebrafish_a		
13073:	.C.---.G.A..GC.CG.AGCT.CT...CGC.GTCT-----GACC.C	Human		
725	735	745	755	765
716:	AGAGGCTTCTGGAAAAAAAAGAGGGGATGCAATCCGGTCTGAACCTGAGA	tilapia		
1899:	.C.....G.G....T..AT...A....A---AGC.....	striped_bass		
7490:	.A...G....TTC---G..A.....G....TCG...C.....	pufferfish		
15109:	...C.-----AGCAG.....	zebrafish_a		
13114:	GACC...-----GGCG.T..C.G..GG.G.TA.GG.C.C.T..T..	Human		

	775	785	795	805	815	
766:	GAAGACCGCTTTAGAGTGCCGAGTGGGAGCTCTGGGAGGGATCACCATT					tilapia
1940:	A..					striped_bass
7538:	..G..G..T.CC.....GC..A.....A.....					pufferfish
15133:	TGC..G....CG.....T.CAC---A.....					zebrafish_a
13154:	AGC..G....CCTCT.....CAC--CGC.....A.G.C....					Human

	825	835	845	855	865	
816:	ACCCTCTCTCTCCCTCTCTCTCTCTTTCTTCAGAGCTGTCATTCTTAA					tilapia
7588:	A.....C..CGG.....					pufferfish
15180:	G.....C..CAC.C.....T					zebrafish_a
13201:	G.....CT...TA.....C..C-C					Human

	875	885	901	911	
866:	TGACCCAGTCTTCACGATGGTCCCCC-----TGATGACGACACTCATTGA				tilapia
7626:	CTGGT..C..G..TT.....TCCCG.....G.....				pufferfish
15213:	.AGGG....G...TA..ATAAGG.T-----CAG.....G.G.C.T				zebrafish_a
13230:	..CTG..A..G...TT.CA..A..G.-----..G.....C.....GGC..				Human

	921	931	938	948	958	
912:	CTGAATCTGTGGGTAAACAGAAGGA---GCAACGGCAACGGCGAGATGGG					tilapia
7676:	T..G--T.....C....--AC.T....--A.T.....					pufferfish
15258:	T.T.--GA..AAA.....GCA					zebrafish_a
13275:	GC.C--AA....A....T....ACGTCT..C..A..G.A.AT..A.G-					Human

	968	978	988	998	1008	
959:	GGGTGGGGGATGTCAGAGGGCACAACAAGAGGCAGCAGAAACAAGAAAGG					tilapia
7717:	AAA.A....CA.....A...G.CG.C..TGA-----..T.C..T					pufferfish

	1018	1028	1038	1048	1058	
1009:	TTATCTATACAGCATATTTAGGATTTACATGGTGATGTATCTGTGGTGTT					tilapia
7760:	..G.A...-.G.G.C.C.G.-----G.C..A.-----T.T.T.A.A.G.					pufferfish

	1068	1078	1088	1098	1108	
1059:	GAAATATGCATTAAGCCATTATTATTATTGTTATTATTGTTATTATTATT					tilapia
7800:	T.....CT-----A...C..A..G.GA..G..G.TC.AC..C..C..C.					pufferfish

	1118	1128	1138	1148	1158	
1109:	ATCATCATTATTATTATTATTATTATTATTATTAGTAGTAGTAGTAGTAG					tilapia
7844:	.CT.CT.C..C..C..C..C..C..C..C..CC.A..A..A..A..A..A					pufferfish

	1167	1177	1187	1197	1207	
1159:	TAA-AATAATGTTTGCTTAAGACTTAGCTTTTATTGCATTACAGTATAT					tilapia
7894:	...T.....					pufferfish
18597:	CC...A.....					zebrafish_b

	1217	1223	1233	1246	
1208:	TTAAATTACTAATAA----GCCTTTTAAACGCC-----CCCACCAAAC				tilapia
18615:	.GGG..A.GC.....TATC.T.A.....GA..ATTTCAT.....TT.TA				zebrafish_b

	1260	1270	1280	1290	
1247:	AGATAA-----AATTAATCATCAGTTAATATGCTCAAATATTTTGTTC				tilapia
18665:	.T....TGCCAG...G..GA..A-----CA.....G...CA..				zebrafish_b

1291:	1300	1310	1320	1330	1340	
17112:	TTTTTCTAC	TATTAAATAA	AGTTTCAGCT	TTTGCTTTTGCT	CAAATATAAC	tilapia
	.G.G.GTC	.C...CG.C.A.	GT.A.---	A..C..T...		zebrafish_b
1341:	1350	1360	1370	1380	1390	
13772:	TAATTAACAC	AGAGTCATTT	CGTCAAAATC	CATATCAGTC	ATTTAAGTTAA	tilapia
					..G.G.C.GG	Human
1391:	1400	1409	1419	1429		
14270:	ATTATGTATT	-TACATTTT	ATTACCCCTC	CCCTCCCCCT	CACCTTCCC--	tilapia
15891:		.T....GCA.A	C...C....	C..A.CAA...--		pufferfish
1678:		...C.C.G...	-G...T....TT	CG...AA		zebrafish_a
13782:		C.CCCCACCC	...CC.CCCC	CG...C...C....	C.C..C	horn_shark
11523:		GCC..C.T..CCT	.T...CTCCTC	.T.....A...AC	.T.TG..T.--	Human
		..CC.C.CTT	T.T...	C...C..TT--		Mouse
1438:	1444	1454	1464	1474		
14306:	-CTCTC-----	TCTTGTGATT	GTTATCATCATC	TAAAGTGGAG		tilapia
15927:	...T.TGGAAAGAT	CGTG....AA....	A.GTGAA.G.G...	CC....		pufferfish
11555:	...GA-----	...TCA-----	TT			zebrafish_a
	...TA-----	...C..C..				Human
	..C...-----					Mouse
1475:	1484	1494	1503	1513	1522	
14355:	TCAAGTAAAGT	CTCCAAAGGT	CAGGT-CTT	GCGGTCAGGT	TTTAG-ATAA	tilapia
15948:	AAC.....					pufferfish
	C..GCAA	C..C.T..C...	AG.A..A...			zebrafish_a
1523:	1532	1542	1552	1562	1572	
15998:	AGGCCGATTAG	AGATGAAAAA	AGGAAACGTT	GAACCGAAAC	CATTAT	tilapia
	CA.G.T...T..C..					zebrafish_a
1573:	1582	1592	1602	1612	1622	
	GCTTTATGCC	TAAACAGCA	AGCACCGTG	ATTTGCATTG	TTAATTTGTATG	tilapia
1623:	1632	1642	1652	1662	1672	
	ATCACGTGTG	CACAGCATTT	GCTGTTAATC	AGTGTGAAAT	TGAAATGACG	tilapia
1673:	1682	1692	1702	1712	1722	
	TGTTCCAAAT	GAAAGAAATC	CAAACAAAAG	CATGACACTG	TGATGGGGTT	tilapia
1723:	1732	1742	1752	1762	1772	
	CTTTGGATTCT	TATGTTGGC	AGTGGCCGTT	TTTCCAGTTCC	CCCAGACGTG	tilapia
1773:	1782	1792	1802	1812	1822	
	CAGTGTTCAG	CAAAAAGTCA	ATGAATGGTG	AATGGGAGCG	CTAACCT	tilapia
1823:	1832	1842	1852	1862	1872	
	GCTGCACAT	AGGGCTTG	TAGTTGCTG	TTTAGAAGT	GGTCACATTT	tilapia
					GAAC	

1873:	CTGCCTCCGAGGCGTAAAGACATCTTCATTGCACTCAACGTGGCCAAAAA	tilapia
1923:	CATTTATTTAACACAGTTGCAGCAAATAAAGTTTTATTAAGCTGGTGT	tilapia
1973:	GACTGTTTCTAAACTCCCAGCTACCAAAAATTTTAGGCTTTCGTGCTATA	tilapia
2023:	ACTTAAAAACAATTACAGCCTGGAGACAGCATTCAAACATCAACGTACCG	tilapia
2073:	TTTAAGCGCAACATTTTAAAGAGCCGAGGCTGATGACTTCCTAAATCACG	tilapia
2123:	TTTCTCTTTGAGCACACTGAGCCACTTTATCCAGGTGGGTGATATCAGAG	tilapia
2173:	GTGCCTCCACACATGCGATTTTCGTGATTTTGAAGTGGGCTGTGTG	tilapia
6286:	A..ATG.....	Mouse
2223:	TGGCTGCATGTATGTGGATGCATATCGTGTGTACAGATAGGCGGTGTCA	tilapia
8284:	..TG..TG...G....TG..TG.G.....A.T..AAC..	pufferfish
6302:	..TG..TG...G....TG..TG.G.....A.A..AA--	Mouse
2273:	TGTGGTCTCAG-----AGAGGAGA-----GGGACAGACTGTGGG	tilapia
8306:	A.ATGTGAT...C..AG-----TT.G.GCC..CC..A	pufferfish
6342:	C.CTAC.A..GGA-----C...AGTATGAACT.....C...G..	Mouse
2309:	GTTCCAGCACCTCCGCTGTCCTTGTGCGCCCTCGCCTGTCCGAAAGTGA	tilapia
8348:	.C...G.T.T.....T..TG	pufferfish
17214:	C.....ATA....A--	zebrafish_a
3778:	.T.T.ACT.....T.....T...C.TA....	horn_shark
6385:	-----	Mouse
2359:	GAAAAGGCCCGA-----GCAGCCACCCCTCCCCAGAGCGACGGATGAG	tilapia
8398:	.T.....GTGGCG.T.C..G...A.....AC.....CC.A	pufferfish
17247:	AT...A..A.T.CAAACG..TCT.T.TTTCT.	zebrafish_a
26559:	...TGT.....	Human
2404:	AAGTGAGGGAATTCCTTTGGCTTTGCGTCCGACTCTTTCATCTGTTTG	tilapia
8443:	C....GAAC.....A..C.G..A---.G.....A.C-----	pufferfish
26572:	.....	Human

2463	2473	2483	2493	2503	
2454:	GAAAAAAACCCCTCCCCTCTTTTCCTTTTCTTTTGTGATCTATCTATCT	tilapia			
8485:	-C...G.T.GATCTAT..A.C.ATC.A...A.C.A.CT.....	pufferfish			
2513	2523	2533	2543	2553	
2504:	ATCTATCTATCTATCTATCTATCTATCTATCTATCTATCTATCTAT	tilapia			
8534:	.....	pufferfish			
2563	2573	2583	2593	2603	
2554:	CTATCTATCTATCTATCTATCTATCTATCTATCTATCTATCTATCT	tilapia			
8584:	.....	pufferfish			
2613	2623	2633	2643	2653	
2604:	ATCTATCTATCGAGTTTAGGAGACCTAAGCTTAAAATAAAAAACGTACTT	tilapia			
8634:	T.TC-----,TT..G..A	pufferfish			
2663	2673	2683	2693	2703	
2654:	CGCAGAGTTAAAAATTAACCTGGAGTTGTTAACCACAAAATGACATAATT	tilapia			
8659:	.A-----C.C.T...TGTC..A.TG.GTC.	pufferfish			
2713	2723	2733	2743	2753	
2704:	ACGCCTAAGAAATGAAAGAACTTGTTACTTTTGTGTTTGAACACCGGTCAT	tilapia			
8685:	G---T..TC.....-T..G...A...TA.....C..T.T.C..GC	pufferfish			
2763	2773	2783	2793	2803	
2754:	CGCGCAGTGTTTGTGGTCAAGCGCCAAAAGATGTTAAAGATCCTTTTGC	tilapia			
8724:	.T.AG.A-----A.CAT.T...GCT.....C...G..TGA.G..	pufferfish			
2812	2822	2832	2842	2848	
2804:	TCTGCTAC-TCGCTGGGTGTTACGTAATGGGTCGTGGCCGGG----GCAG	tilapia			
8763:	A...T.G.A..AAC....C...T.C..CA.T..T....A..GCAT....	pufferfish			
2858	2868	2878	2888	2898	
2849:	ATAAAATCTTGTGATCACCCTGAGATAACACTTCAAAAATGCTTTTGCGC	tilapia			
8813:	..GGG...G.....GT.TG.....T..AC...T..-.....	pufferfish			
2908	2918	2928	2938	2948	
2899:	AATGGGTGACCTTGTGCATTTACAGTAGTGTCACGTATATTGTGTGTGGC	tilapia			
8862:	..CA.A.....GG.....G.T.....ATT	pufferfish			
2958	2968	2978	2988	2998	
2949:	TTAGATAGTAAAGGACAGCGGATTGGTTTGGAGAGCTTGCTGAGTGTGAA	tilapia			
8912:	A.G.....AT.A.AT.....A..	pufferfish			
3008	3018	3028	3038	3048	
2999:	ACGCGGTTTACTTATTTACATAAAGCAATTTCCAAAGCATGGAACGCAGT	tilapia			
8940:	.A.T.A.-----G.G...G..GG-----	pufferfish			
37605:	...C.TA.	Human			

3049:	TATTATTATTTTATTCAATGAACATTTGATCCACAT--TCTTGTGGCA	tilapia
8960:	-----C...C.C-----C..C.C.CC...C.AA.T	pufferfish
37613:	.G.....GC.A..A..G.....C.A.C.....	Human
3097:	CAAGTGCAGAAAATTGGACTGCAGTGTAGGCGCCTCTCCAGTGTCTACTT	tilapia
8988:	...A.C...TGTT.GAA-----A...G.A....-----G.C.G..	pufferfish
3147:	CTTCAGGGGAAGATCAAAGAGTGGGGAGCGCCCCCGCGGCAGACACTGC	tilapia
9025:	T.G.....C..T.....A-.....T.A.....T.TC..	pufferfish
3197:	AGAATGCGCCCC-TTAGTTTACTA-GCCAGCCCAACTTGAAGTGTGACCA	tilapia
9074:	T..TT..C..T..C.....C.....	pufferfish
20255:	A.....-T.A.....	zebrafish_a
3245:	TGGAGCCTGCGCAGTCTGC-----GTGTAATCCAATCCTTGGCCCCAGCG	tilapia
9124:	AG..CCGAAC...T.A.....TTAGAA-----A	pufferfish
20285:	..	zebrafish_a
3290:	GTGCAGATCTGTCAGAATGTTTGCTTTTAGCAGAA-AATGTGCTTCAGTG	tilapia
9170:	..T.G..GAA-.GCC.CT.C...A..G.TGT..T..A..TTA...C..	pufferfish
3339:	CGCGATGGAATTGCGCACGAATTAGTTTGGTGGGTGTTGAGCCAGCCGCT	tilapia
9219:	A.TA..A...G---C.....GGC.A-----C.CA...GG---A.	pufferfish
3389:	GGCTGAGGCGCACTGCGTTTACACACAA----GGAACCTGGAAGAAAAT	tilapia
9261:	.A.A...TAA..C..A.G.....G.AGGAGTCA...T.....A...GC	pufferfish
3435:	AACAATTTAGCCTCTCC-TCACTAAGGTGGCCCCCTCCCGTCTCCATTGCT	tilapia
9311:	T...T..T.....TTC.A..	pufferfish
3484:	TCAACTTGGCCTTGAAACGGGATGACGCAGCTACCAGAGAGTTAACTCGT	tilapia
9356:	.T.....G.....T--.....G..C	pufferfish
3534:	TGACCTTGGAGCGAAACGA--GTCCTGATGACTATACAGCTGGAATCTC	tilapia
9404:	..T.....A.....AA.TT...C.....A.....CGA..	pufferfish
3974:	...T..A...T....TA.--A..T....GT.	zebrafish_a
3582:	TGTGCTGTAAGAATTTCTTTTATCGCACTTCCCTGCTCCATCCCGCACAC	tilapia
9450:	..C.GC.....C...T....-T.T-T.....CT.A.....T.--G.	pufferfish

3641	3651	3661	3671	3681	
3632:	CCTACGCTATTACACCAAGGGCTTAGCAAGCCACTGAGATCAGACCTGT	tilapia			
9496:	...GG.-----...GA...A....G.....G.G.AG.....-----	pufferfish			
3691	3701	3711	3721	3731	
3682:	TTACCCAATTAAAAGGGGAACATCACGGGTATGGCTTACTATTAGTTC	tilapia			
9533:	-----.....--...A.C.TG.T.TT.....AA..G.-----	pufferfish			
3741	3751	3761	3771	3781	
3732:	TGCAGCAGCAGCAGCAGCAGCAGCAGGGAACCCACCAGGTGCAAAG	tilapia			
9567:	-----A.A...T.....GA.....-	pufferfish			
3791	3801	3811	3821	3831	
3782:	CCCCGATATTTACAAGAGTGCATGCAATTCTTTAGTCTGGTATGTGGGT	tilapia			
9598:	TT.....G....TGT...A..	pufferfish			
3841	3851	3861	3871	3881	
3832:	CCCTGACATCTTCGAGAAAGGTGATATTTACAAGTCTGCGTGGTTGCAAT	tilapia			
3891	3901	3911	3921	3931	
3882:	TTTTTTTCTTCGTTTTTTTTTTTTTTTTTTTGTTCGAGAGTGCCGCTGT	tilapia			
3941	3951	3961	3971	3981	
3932:	CATCAGTCCCCTGTCATGCTCATGTGCCTCTGTTTTCTCGCTGCTCTCC	tilapia			
3991	4001	4011	4021	4031	
3982:	ACTAACTTTAGCCTCTAATAATGAGCGCTATTGAGTTATACTGCCGGCAA	tilapia			
4041	4051	4061	4071	4081	
4032:	GATCATCCTATTTACATTTCTGGCCTCAGTTTTTCAGGGGTTTTTTACCAC	tilapia			
4091	4101	4111	4121	4131	
4082:	AACTGCCGTTCAAATAATGATGTGTGGATGCAAAGCAACATACAAACGGG	tilapia			
4141	4151	4161	4171	4181	
4132:	CATCCCGTTGATTTGCATGTAATTGAAGGCGTGAGACAGATAGGTCCCTC	tilapia			
4191	4201	4211	4221	4231	
4182:	AGCGAATAAGCCCAATGTTTTAGGAGTTTTGTAGTTTTACAAATCTCTGT	tilapia			
4241	4251	4261	4271	4281	
4232:	ATAGGTTAAGTTGCTGCCTTTATCACACCTCGATTGACTAGAAAAATACC	tilapia			
4291	4301	4311	4321	4331	
4282:	CGTAAGGGAACAGCGGGCCTTACGTCAACTCAACTACGTCTGCAATTTTT	tilapia			
4341	4351	4361	4371	4381	
4332:	TTTGAGTTGTTTGATTTAGATTGTTTCATCCCGTGGAGTTTTGTTTTGCTT	tilapia			
12643:	...T....TT..	Mouse			

4391	4401	4411	4421	4431	
4382:	TGTTTTTGGTTTCTTAATTAATTAATCCAAGTCTTTATTTTTTCAT	tilapia			
12655:	.T....G.....G...	Mouse			
4441	4451	4461	4471	4481	
4432:	TCAATTCAGGTCGTGAACGCCAACTGTGCAGGCCTTTCCCCTCCAAAT	tilapia			
4491	4501	4511	4521	4531	
4482:	ACCCTAAAATCAATGCTACTTTGATAATAATGGTTTTTTAACCTATTTTG	tilapia			
5703:	.T..C..G..-...AAG....C..TT.G.....	horn_shark			
4541	4551	4561	4571	4581	
4532:	TAAGTTTCAAAACCAATAAAAAATTATTAGGAAGATAGGAAAACAGTCC	tilapia			
21589:	.T.TG....C.TG...A.....TA.....GT.....G.	zebrafish_b			
5735:	G..T..C.....	horn_shark			
4591	4601	4611	4621	4631	
4582:	ATGCAGAGGTATTTGATTTCTGAAGTAACGAAATGCAACCATTCTATTTCT	tilapia			
21628:	.	zebrafish_b			
4641	4651	4661	4671	4681	
4632:	AATCTCCACATTTTCGACAACATTTTAAAAACGGGCGAGCCACTTCAGTCTC	tilapia			
4539:	...	Human			
4691	4701	4711	4721	4731	
4682:	TATCTTTAAATCAGACAAACAAACAAGGAAAAAATCACCTTAAGGTTAA	tilapia			
20862:	A.G....AGAA.A..T....	zebrafish_a			
4542:	.G..ACA....A..A.A.C.A.....AA.C....AG..C.C.-----	Human			
17943:	..AT.A.T...T...T..AT...T..AT.AA.A..TC....	Mouse			
4741	4751	4761	4771	4781	
4732:	GAAAAAGAAAACCCAAATTCCTCCAAATCAGTCGCTTTGTACGTTTTAT	tilapia			
20888:	T...	zebrafish_a			
4586:	-----..CC..T.C...A.....	Human			
17984:	A.....A...C.TA.	Mouse			
4791	4801	4811	4821	4831	
4782:	TGACAGAGTTGCAGTTTTAATGACATTTACAATTTCTTCTTTGCTTTAGG	tilapia			
4841	4851	4861	4871	4881	
4832:	AGTGCAGAAAGAGCAAACCTCTGTAACGCAGCTTAACAAGTGACATAT	tilapia			
18295:	...C..G.C.....T..CGG	zebrafish_b			
4891	4901	4911	4921	4931	
4882:	TTAACCTCACTCCATTGCTCAAAATGTATATTTACAGTTAAAAAATGGTA	tilapia			
18315:	ATGGC.....TTA...GTCA...T....	zebrafish_b			
4941	4951	4961	4971	4981	
4932:	AGGCTACAATTTAGAATGCAATGTTACTTATTTTGGAGCAATTTTAGCGC	tilapia			

4982:	TCACGATGCTATTATTGAAAAAGAAAACAACTGAAAAACCGCTTCGCT	tilapia
21878:	..T.A....C..C..CTG.A.....GT..C.G..AGT...C..	Mouse
5032:	AAAAAATATTTTATTTAACTTTGCAAAATAATAATAAAAAATCCCC	tilapia
5082:	AAAACAAAACACAATAATAACAATAATAATAATGATAATGTGTCGAT	tilapia
5132:	CAAAATAAAAATGTAACGATGATGCTAGATAAGGACAAAATGACTTAGTG	tilapia
5182:	TCGGCCTGATGGCATTAAAAAGCAAATAATACTATAATAATACTTCAGTC	tilapia
5232:	GGACGGTGGCCTCGGATCAGAAATACAACAGATGTGGAACCGACTGAACA	tilapia
5282:	TGCAGTGAAAGGCAGCACAGATCTGTATATTTACTGAGGTTCTCGCATGC	tilapia
10550:	..T.....GAA.GA.C.T..T.....	pufferfish
5332:	CAATAAAGTG-ATTTACATGCAGCTTACAGGCTATAGTTTAG-CAGGC-	tilapia
10576:	.CG....T.ATT.....G..T....G.A...T.C-----	pufferfish
5675:	CC.T....C..G.G....A..A..T	Human
5379:	-----TGTTAACGCAACGTTTGAGCCACGGCGAGATAAA	tilapia
10616:	-----A....A...A.TA.TC.C-----C.G.	pufferfish
5709:	TGCTCTAGAAAGTGA.A....AA..AA.G.A.AA.-----	Human
5414:	CTGAAGCAGAGCGAAAAGTTGCAGCAAATATGTCAGTCAAGAGG-----G	tilapia
10646:	.CTCT...C-----TGC--GCG.....A...CACAT.	pufferfish
5749:	T.TTTAA.C-----GCT..G.....A.....A	Human
5459:	AACATTGAGAACACCGTGGGAGTAAGGATTTCTAGGGAACGTAGACCT	tilapia
10684:	.G.G.CA.....--T.AG...GT..GA.GTGG.T....C..G.....	pufferfish
5778:	AA.....TG.---T.A....G	Human
5509:	TTAGCTGGCTGCATGTGTCTGTCGTCACAAAAAAGAATGAAGTG	tilapia
10732:	CG.---A..GT.C.....G.-----G.GACG..G.C...	pufferfish
5559:	GCCAGCTTTCTTGTTA-CTTTTATGCAGTCCGTCATAATCACAGTGCAG	tilapia
10767:	TT.GA....T.....GT.....CA.GA.....CC.T..	pufferfish

5617 5627 5637
5608: GCAGTCGTCCAGAAAATATGAAAAGACAAGTGTGT----- **tilapia**
10817: .TGA.....C.....CA.C....T.GT.....ACGTGTGTGTATGT **pufferfish**

5649 5659
5644: -----GACCGCCCTGTGGTTC tilapia
10916: GTGTGTGTGAGAGAGAGAGAGAGAGAGGGAGAGA.G.....T pufferfish

5719 5724 5734 5751
5710: TTGACAAAAGCA-----CGTGCGATCAACACCGACAT---TTGACTGCAC **tilapia**
11013: .G...TGCT.T.GTCTTTAAA..T.TGC.....G..GAC.CT...T.- **pufferfish**

5808 5818 5834 5842
5799: AAATTTATAGCTGGGCATAA CTTTATAT ---AGACTGCTTT - -ACCAAG **tilapia**
11105: GT T ACTTT G GCTA . . T . . T AA . . TT . . **pufferfish**

5894 5904 5914 5924 5934
5885: CTCTGACTGCATAACTTCAGTGCCAGTACAAACACGGGATTGAGCCTTGA **tilapia**
11205:T.CG.A.....TT.....GAA.G..C....CA.. **pufferfish**

5991 6001 6011 6021 6031
5985: CAGT---CTTAGAAACTTTGCAGGATGCTTGAAATAGATCAAGGGGTGCA tilapia
11296: .T..ATA.....T.--...T..A..T.C. pufferfish

6091 6101 6111 6121 6131
6082: TATAAGATTAATCACCGTTTAGTCTTTCCCTTTTCATCCCGCTTACGTTTG tilapia

6132:	6141	6151	6161	6171	6181	
	TGCGTAAATCAGAGAATACAATGCAAATCCGACAAGAATT	CAGTGGTGAA				tilapia
6182:	6191	6201	6211	6221	6231	
	TCATCTGAGCGTTTAAAAGGTGTTTCTAACGAAGGTTCT	GCCACACGAT				tilapia
6232:	6241	6251	6261	6271	6281	
	TTTAGCACAAGCCAGCGGTGAATTGTGCGTCTCCTCGGCGGGCACTGGGC					tilapia
6282:	6291	6301	6311	6321	6331	
	CCCTCCTGTTGTCTGTGTTCAATTGTACTTGGGGATGTCTCGTGTCTGGAC					tilapia
6332:	6341	6351	6361	6371	6381	
	TGACCACATGGACGCGCAGACCGCCCCATGGCTGGCCTTCTTACCGGAG					tilapia
6382:	6391	6401	6411	6421	6431	
	GACAGTAACATGAACAATTAAGGACAGAACGGGGATTAAAAACACGATT					tilapia
6432:	6441	6451	6461	6471	6481	
37808:	TTTTAAAGAGTCTCTCTGGGGCAAGAAATAAAAAAAGCGCAGAAAGAG					tilapia
24055:		...A.....GA..G.....A.AGAG..AGA				Human
		A.....AAAA..G..A..				Mouse
6482:	6491	6501	6511	6521	6531	
37840:	TGAAAAGAATACTGATATTAATGCAGCTTGATTTAACATGAACAAAGTC					tilapia
24083:	AA.....					Human
	AAA.....					Mouse
6532:	6541	6551	6561	6571	6581	
25911:	CATATACCACAGTGTGCATTAACGCAACCGTGTTTTTGTGTTGTTGTTG					tilapia
		..T..G.....G.				Mouse
6582:	6591	6601	6611	6621	6631	
25932:	TTTTGTTTTTGGATTTTTAAAAAAAGCTTTGCCCGTATTGACGAGAACG					tilapia
	G..					Mouse
6632:	6641	6651	6661	6671	6681	
	CCACGAGGCAGTGTAGTCAACAGGCCGGGCCTTGTAGCAAGACTCATAAA					tilapia
6682:	6691	6701	6711	6721	6731	
	TATTGTTGCATATTGCTGATGAATGATTTCACTTGAGCTTTCTTGTA					tilapia
6732:	6741	6751	6761	6771	6781	
21011:	CGATGACTTCAGAACCAACCCGACCAGCTCGTGTTGAATCCCCTTTACT					tilapia
		..A.....T....T.				pufferfish
6782:	6791	6801	6811	6821	6828	
21027:	TAAGCCTTACAATTATTCAAATCCGCCGAATGCAATAACTTTTCCA---					tilapia
30097:	.G....CGTG...C...					pufferfish
	T..TT..G.....A....A.TAG.					zebrafish_b

6838	6848	6858	6868	6878	
6829:	TTGACTACTAAATAAATGTTGCATGTGACGCTGTTTATGGGTCTAAACGG	tilapia			
30129:	T..	zebrafish_b			
6888	6898	6908	6918	6928	
6879:	AGATATCTTTGAAAAGGCAGAGCCTTTGCAATCCAAATCCAAGGAAGGAA	tilapia			
6938	6948	6958	6968	6978	
6929:	CAGATTTCCCTTTGATCTCAAAAAGACTGACAGCAGCCTAGTTCGGAATG	tilapia			
6988	6998	7008	7018	7028	
6979:	TCATACTTCTCTTTAATAATAAGCGTTAAAAAACCGCGTTTAATGGCTCA	tilapia			
7038	7048	7058	7068	7078	
7029:	TTTGAAAAAAACAAAACAAAGAAAAAGTTGGTAACGACAAGCTGATATT	tilapia			
28956:	A....A...A.....A.	Mouse			
7088	7098	7108	7118	7128	
7079:	TATTTATTTATTTTATATTTTGTCTCAAACTCGAAACATTAAGATTAAAT	tilapia			
7138	7148	7158	7168	7178	
7129:	CTCTTTGGGTGTTCTCGCTTTTGGATAAAATGTGGAACCTATTAAAAAGAA	tilapia			
7188	7198	7208	7218	7228	
7179:	GAGAAAAAAATATCCATCCCAAATACTCTCTCTCCATCTGCATCATATGC	tilapia			
35943:	..	Mouse			
7238	7248	7258	7268	7278	
7229:	CTTCTAAATCAAGCACCTCCCCCAAAAAGACAAAGCATCAAGCACACTTT	tilapia			
11788:	.	pufferfish			
31183:	...	zebrafish_b			
35945:	A..T.....AC..T.T.....	Mouse			
7288	7298	7308	7318	7328	
7279:	TTATTTCTATTTTTTTAACACAAACTGCTGTCTTAAGCTTCCTTTTGT	tilapia			
11789:	T....A.....T...G.AT....T.	pufferfish			
31186:	T.....G.	zebrafish_b			
45218:	...C..TAG.....GCC.CA	Mouse			
7338	7348	7358	7368	7378	
7329:	AACAACCCCAGTCCATCCCTTTTTTGTGCGCCGGTGCCAGCAAGTCTACG	tilapia			
45238:	T.....T..C.....C.	Mouse			
7388	7398	7408	7418	7428	
7379:	GTTCACAATATAAAAGTAAACAGCCTAAATCAGTGTTTACTGTTTCATTAA	tilapia			
7438	7448	7458	7468	7478	
7429:	TATCTAGTTTCAGTTGATATATTATCGAAGTTAATGATGTGTTGGAATTT	tilapia			

7488 7498 7508 7518 7528
7479: ACAGCTGTTTCATATTTTAGATAACAAATGTGACGGAATTTTTTTTTTAC tilapia
3628: . C . A TA . C . C A . AGTA striped_bass
23153: A AC AC . . . pufferfish
5912: A . A . G . G . G T . horn_shark

7538 7548 7558 7568 7578
7529: AATTATTATTCATATGAAGTATTTGGCTTGTGGGCTGGAAGCTAAATÄ tilapia
23188: .TA... pufferfish
5938: ... horn_shark
7094: AA . G . G AT . . A . . A . T . T . GGAAG . . T . . horn_shark

7588 7598 7608 7618 7628
7579: CCTCCATCCATAGCAGCTTCTCGTTGGGTGTTTAGTTCCCAGTCTTATA tilapia
7133: horn shark

7638 7648 7658 7668 7678
7629: GCAGAAACAGTACACACAGGGACATGTAGGTGACAATTTATGGTGGATTI tilapia

7679: GGAAATCTGGTAAGGACCAAGGGAAATCCATCAGGTCTACTGCAG **tilapia**

12483: . . . CT.A . . . C **pufferfish**

7738 7748 7758 7768 7778
7729: TGAATAGACGGAGAGTCACTGGTCATAAACACAAACCAGCAGACCAGACA **tilapia**
12494: A.....TCTG...C.T.....G...-...T.....T..... **pufferfish**

779: AACACACACA⁷⁷⁸CACACACACA⁷⁷⁹⁸CACACACACA⁷⁸⁰⁸CACACACACA⁷⁸¹⁸CACACACACA⁷⁸²⁸

12542: C...C....G-----GTCTGTC.CGT.CTCTTGTTT..

tilapia
pufferfish

		7846	7855	7861	
7829:	CACATGCAT--GCATTTTCTTTTTCACA-CATG-----TCT				tilapia
12581:	G.G..CA.C-----C..CC...G...A-----...				pufferfish
45014:	AA.TC...G.A.G..T...A.G..-----..G				zebrafish_b
6012:			.C.C....-G...CCTTCATGACATTC..		Human
47932:				...	Mouse

		7874	7884	7890	7900	
7862:	ACCAAAAG	-----AAGAAGAAAAAAGAGAGAG	----	AAAGAAACACC		tilapia
12609:	G	ACCTGCTCCGA . . . TCCC . . A	CGACATCTT . G . A	--		pufferfish
45047:	G . . C . . C	----- T	A			zebrafish_b
37848:		----- . GA . . . G . . . A	. G	. G	G	Human
47935:	. T . . . G . A	----- . . A . . A	A			Mouse

7910 7920 7930 7940 7950
7901: CCTAAAAGAATAATTAACAAATCTCAGCACTGTTCTTTTACATTTCCTA tilapia
12657: ---...A.CA...-...G.-----...C..... pufferfish
37882: ---...G....A..GA..G..G. Human

7960 7970 7980 7990 8000
7951: ACGCTGGGATTCAAAGGTAGGCCTACGTGCCACCCAGAAGAAGAAGAAGÄ **tilapia**
12691: G...T...A...AA-TAATCGT.....ACT...G----- **pufferfish**

8001:	AGAAGGAGCGGGTTCTGAAGTTCGCAAGAGTAAA--CAGGGGAGAGCA	tilapia
12734:	-----A..G.-...G..TG...CA...ATA.A...TA.AA.	pufferfish
8049:	CAAAATGACAGTAAAAGTTAATGTCCTCCAATAGCGTTCATTGGGACAGG	tilapia
12774:	..T.....TT.....T....C..TC...A....G....	pufferfish
52114:	A.	zebrafish_b
8099:	AATTCTCACCCCTCTTCCGCTCTTTTCAAGAGCTCAGACGGTC---TCTT	tilapia
12824:	C.....CAT.....A..T---C...	pufferfish
22602:	CTT.T....T.G.----.A.	zebrafish_a
52117:	.C.....T.TG.....AG.T.C...G...	zebrafish_b
58299:	TAGC...	zebrafish_b
13164:	GG..T-----GC....AT....AT.....A.GT-----G.	horn_shark
8146:	CAAAGCCTGAATAGACCGACGGGCTG-----GATGGCTAGACAGCAACAT	tilapia
12871:	T.....T.C.....A.C.....G.....T.	pufferfish
22622:	T.A.....G..A..A...ACTGTGTCGC...A....G.....T.	zebrafish_a
58316:	...T.A-----A..AA.GGC-----CC..A....T....T.	zebrafish_b
13205:	...C..G....GA--.AG.ACT.AC-----ATC.....T....T.	horn_shark
53836:	G...T....T.	Human
49483:	..A.....T.	Mouse
8191:	TCAACTTGACCTTGGCCTCCAACCGCGTTTACGTCCTATGCAAAACACGC	tilapia
12916:	G.....CC-----G.GG.A.AAA	pufferfish
22672:	G..GA....CAG.C..GCGC.T....T..AG	zebrafish_a
58351:	G...T..GA.AC..A.....	zebrafish_b
13248:	TT.G...T..C..ACC.G...T....	horn_shark
53853:	G...T..C.GACCAG...T....	Human
49500:	G-..T..C.GACCTG...T....	Mouse
8241:	ACACACACCATGTCGAGAGCTTTTCTGTTTCTGCCTTTGCATACTGTAA	tilapia
12960:	G..G-----A....A.TG.....G.....	pufferfish
22722:	...A-----A.A.G.G.G-----C..C.T..C...ACT.....	zebrafish_a
8291:	ACAT-----GTCTGAAG---TCAAGTGTAT-----AAAA	tilapia
4809:	GG	striped_bass
12989:	...CAGAGGAAGA...A...GTC..TG.AA...TCAGCTCGAACAGG..	pufferfish
22762:	...AAACGGAA--.C.	zebrafish_a
8317:	TAATCCCCCACAACACGAGATTATCTCTCGTGTCTCTTTTCTTTTCTTTTCT	tilapia
4812:	...A.A.T..T..T.AA.T...-----TC..C.....A...T	striped_bass
13039:	.G.A..	pufferfish
28218:	T..T..C.C.....	pufferfish
10374:	...TC..T..C.T....T.CC....C...C.	Mouse

	8376	8386	8396	8406	8416	
8367:	TTTTCTTTTT	TAACTGCTATCGAAATACACAAGTGAATCCTGTCTCCCT				tilapia
4854:	.....					striped_bass
13045:				AAA.T.AA		pufferfish
28236:	...C..					pufferfish
7414:				A.		Human
10405:	...C.....					Mouse

	8435	8445	8455	8465	
8417:	TTCAGAACT-GCACGGATGCGCCTCATTATACGTGTTTATATATATTATA				tilapia
13053:	C...A.GT.CT..TAA.C....-G.G..T.G.C...-----GG.T.G				pufferfish
18581:		..C...A.A...TC.C.CG..T..			zebrafish_b
7420:	C...A..AA-AT.AAA...AA.T.T...C..T....G.....-G.C...				Human

	8475	8485	8495	8505	8515	
8466:	TATGTGTTATTTCAATGGCTCCAAGTTACTAGGATCATACTTTTTTTTAAA					tilapia
13094:	.C...C.....-.....CG.....G.....-----G...T.					pufferfish
18605:	.....					zebrafish_b
7468:	T.....-----G...CAAA....A.....T.G.A.AC.C.					Human

	8531	8541	8551	8561	
8516:	AAAAAA----	TATATATCTTATACGTCCTATCGGAACAAAGGCGTATCAG			tilapia
13126:	.GGTG.-----CGA..T..AGG..T-----T.G...ACCC..C				pufferfish
7509:	GGTTG.GTAT..C.....G.G.T----GC.T..G.....A.T..T....				Human

	8571	8581	8591	8601	8611	
8562:	CGGGAGACAGAAGTAGCATGTTTAATTCCGTGTATGTCGGTGCAATGCAC					tilapia
13160:	ACACT..A.A...G.AT...-----					pufferfish

	8621	8631	8647		
8612:	AGATATAGCAGACTTTATTTTACACT----	AAGAAGGTTCTGTTGTA--			tilapia
13180:	-----..GG...C.....TGAA.C.G.....T.CAC...CT				pufferfish

	8663	8673	8683	8695	
8656:	--AATACTGTTAGAATATTAGAATTTGTACAGCGAGGC-----AAAC				tilapia
13217:	CC..A.....A.CC.....CGC..T.G.T...TAATATTCTCTA.T.T				pufferfish

	8705	8715	8725	8740	
8696:	AAAGGCAAGTCAGTATGCATGCGTAAAGGCCAAAAGC-----GATGCATA				tilapia
13263:	GG..A...CG.CTGT...-----CTT.A...CG...CTCTG.T.ATT..				pufferfish

	8750	8760	8770	8780	8790	
8741:	TGAGTCACATGTAAGTGCCTGGGTCACAACGGTTTTCTTTCTTTCTTTTT					tilapia
13310:	ATTTT.C.C..C....A.T.----.TT..T.A.C.GA....A.-----					pufferfish

	8800	8810	8820	8830	8840	
8791:	AAATTGTTGCATACTTTTCAATAATCGACTCTTGTTTGCACTTTATATGT					tilapia
13351:	-----AC.G.....GG.C.G.A....AGT.....					pufferfish

	8850	8860	8870	8880	8890	
8841:	GAAAATAAACATTTCCCCTCTCAAAATGACGAAATTCTATCATTGGATG					tilapia
13383:	----.A...TG.....GACG..TG..G.C..TG.CCA...T					pufferfish

8891:	CATG--AAACCTAAATGAGCGTA-AGCACAGATTCATGTAAAGTGTACCT	tilapia
13421:	TT..TC...ATC...AC.T..A.C.TT...C...T---.G..A.A.G.GA	pufferfish
8938:	TACATTCTG-----TTTTTGAAT---GAATGCACATCATCCA-TGCTG	tilapia
13468:	.-.....ATTTAA.....T.G.CAGGA..A.....AAT....T.T.G.	pufferfish
8978:	ATTAAACCAATATGACAAAAGCCAAACCCCTCGATAGGTG-----	tilapia
13517:	GCG..G..C..A...C....GAAT.G.T-----..CA.C.-----	pufferfish
23337:	...TTTGAA.CG....ACATCCTTT	zebrafish_a
9019:	--CAGTCACCTTCCCTTCGC---CGCATTTTCTCCATTTAATTATCTGC	tilapia
13552:	--.C..TTA.C.TAT...TGTA..TT...C...TT..G.....	pufferfish
23362:	GA...ATCATC..A.A..A.---T.....AGT..GG.....G.G.TA..	zebrafish_a
16124:	...T.	horn_shark
9064:	-----CGATGTTTACCGTCCT-CTTTGCATAGCCCGGTCACGTGACCAC	tilapia
13600:	GCTGGCT.....C-.....T.G.....GTACA	pufferfish
23409:	ACTTG-A.C..A...TT....AT...A.....A....CA	zebrafish_a
58999:	.C.....T.AA.....G-----TG	zebrafish_b
16129:	-----AT..A...T.A..TA-.....T...T..T	horn_shark
9107:	ATCTGGACCAATAACAGCGCCACATCTG-CGCTCTT-GTGCGCGTCAGAG	tilapia
13649:	.C.CT.G....G..G...GT.C..G.-.....C.-...A.....	pufferfish
23452:	TGT..AG....CGAGA..TG.TTCTG.AT.TA.GA-.G.T.....	zebrafish_a
59034:	C...C.T.....TTGG.TCCTGA-...A.GCG.G...A.GG.TA	zebrafish_b
16166:	C..GCAG....G.GGAG..A.GT.TCA-GCGA.AC-TG.....AT.	horn_shark
9155:	TGGCTTTACTCTCCGGAAGCAGTATCTGCCTTTTTTTCAGTCTGAGGGCT	tilapia
13697:	...AA.....C.T....C.....CCT.....	pufferfish
23501:	.CA-----C.G...-..CC.....G.CTAA...	zebrafish_a
59083:	.CTG..ACTC.A.T.ATCCA...CT.....C.....TG...AA	zebrafish_b
16214:	CT.-C.A.G...GA.A..CT.....C.....T...GC	horn_shark
55857:	..G.....	Human
51570:	..G.....	Mouse

		HoxA13a:1	
9205:	TTTTAAAAAAGAGCCATAAGCTTCAATGTTGGATGC----CGTGCTATGA	tilapia	
13745:	C...C.....	pufferfish	
23532:	.CAC.....C.C.TC.....CC.....G.....	zebrafish_a	
59128:	.C.....TGCTG.GC..C...A..G-----	zebrafish_b	
16259:	CG....CT..TC.....A.....	horn_shark	
55865:	C..C...CTG.GG.--.TC.CC...GGCT..G.....	Human	
51578:	C..C...CTG.GG.--.AC.CC...GGCTG..G.....	Mouse	

HoxA13a:1

9260 9270 9280 9290 9300

9251:	CAACGTC	ACTGCTC	CTCCGTC	CTCGTGG	GTCGACCC	GTCGGTG	GATGTT	C	tilapia
13791:	.....	T.....	G.....	T.....	.....	.....	.....	.....	pufferfish
23575:	.....	A..T.....	C..G.....	A.T.....	-----	C.....	T.....	.....	zebrafish_a
59169:	..G....	TT.A....	A.T.C....	A.T.....	-----	.....	.....	.....	zebrafish_b
16300:	..G....	CG..A.A..	T.A..C....	A.....	A.T---	.....	.....	.....	horn_shark
55913:	..G.C..	CG.....	AC..C....	A.....	G..CA.C..	C.....	T.....	.....	Human
51626:	..G.C..	CG.....	.....	.....	.....	.....	.....	.....	Mouse

HoxA13a:1

9310 9320 9334 9344

9301:	CTCTACG	ACAACGG	CGGCGG	TTCC----	GATGAAG	TGAGCA	AGAACA	T	tilapia
13841:	.....	.....	.....	.....	.....	T.....	.....	.....	pufferfish
23622:	.....	T..T....	T.....	TA-----	C..CACC..	A..T..	.....	.....	zebrafish_a
59216:	.....	T.....	.....	TG-----	.....	TA.....	A.....	.....	zebrafish_b
16347:	G.....	.....	TA-----	TG-----	.....	A.T.AT..	A.....	.....	horn_shark
55963:	.....	.....	.....	CCTGGT	GGCC..C..	GC.C.A..	.....	.....	Human

HoxA13a:1

9345:	GGAGGGT	-----	-----	-----	-----	-----	-----	-----	tilapia
13885:	.....	G-----	-----	-----	-----	-----	-----	-----	pufferfish
23666:	...A..	G-----	-----	-----	-----	-----	-----	-----	zebrafish_a
59254:	...A..	A-----	-----	-----	-----	-----	-----	-----	zebrafish_b
16385:	...T..	A-----	-----	-----	-----	-----	-----	-----	horn_shark
56013:	...A..	GGCGGG	CGGCGG	CTGCAG	CAGCGG	CTGCAG	CGGCGG	CGGCTGCC	Human

HoxA13a:1

9354 9363

9352:	-----	TTT-----	-----	-----	-----	GCTGGT	GGC	tilapia	
13892:	-----	-----	-----	-----	-----	-----	-----	pufferfish	
23673:	-----	..C-----	-----	-----	-----	A.A..A..	T	zebrafish_a	
59261:	-----	.....	-----	-----	-----	TG..A..	.....	zebrafish_b	
16392:	-----	.....	-----	-----	-----	T.A..A..	G	horn_shark	
56063:	GGGCCG	GGGGCG	GGGGGC..	CCCCC	ACCCG	GCGGCT	GCGGCG..	A..G...	Human

HoxA13a:1

9377

9364:	AACTT-----	-----	-----	-----	-----	TGCTGCG	AA	tilapia	
13904:	.....	-----	-----	-----	-----	.....	.....	pufferfish	
23685:	.....	-----	-----	-----	-----	CT.GC.A.	G	zebrafish_a	
59273:	..T..	-----	-----	-----	-----	-----	-----	zebrafish_b	
16404:	.....	-----	-----	-----	-----	CA.A..A..	.....	horn_shark	
56113:		CTCGGT	GGCGGC	GGCGGC	CGCGG	CTGCGG	CGCGGC..	G..C..	Human

HoxA13a:1

9387 9397 9407 9417 9427

9378:	CCAGTGCAGGAATCTGATGGCGCACC	tilapia
13918:	CGCATCCCTGGCACCCAGCACGG	pufferfish
23699:	..C.....T.....C.....G..T.....	zebrafish_a
59287:	..T.....T.....C.....T.....G.....TG.TA	zebrafish_b
16418:	..A.....T.....C.....GT.TA.TT...T..G..T..AA	horn_shark
56163:	..A.....T.....C.....A.....A..T.....T..T.	Human
51745:	C.C..C.....G..GC..T....G..AG..AG..C.	Mouse

HoxA13a:1

9437 9447

9428:	CGTACTCGTCCAGCGACGTGC-----	tilapia
13968:	.T.....T.....-----	pufferfish
23749:	.T..TC.....A...G-----	zebrafish_a
59337:	.C...A.A..G..T..G....-----	zebrafish_b
16468:	.C...A...G..T..A....-----	horn_shark
56213:	..C.G.C.A...AG..CC.CCGGGGAGGCGCCCCCGTCGGGTGCCGCC	Human
51777:	..GC.G..NA...AG..CC.CGGGGGAGG	Mouse

HoxA13a:1

9457

9449:	-----ACACCTCCGGGATG-----	tilapia
13989:	-----C.....G.CC..T-----	pufferfish
23770:	-----CTG.TG.T.CAGC.-----	zebrafish_a
59358:	-----CAGTG..G..C....-----	zebrafish_b
16489:	-----CAG.G..T..T..T-----	horn_shark
56263:	GCTGCTGCCGCGGCTGCCGCTGCAGCCGCCGC.G..G...CCGC.TCGTC	Human

HoxA13a:1

9468 9478

9463:	-----GGCGAGCCTGTGAAAC	tilapia
14003:	..A.....G.....G.	pufferfish
23784:	..T..TT...GA..G.	zebrafish_a
59372:	..A.....C....	zebrafish_b
16503:	.CT..A....C....	horn_shark
56313:	CTCGGGAGGTCCCGGCCCGGGCCCGGCCGGGC.CA...G.C.CC..G.	Human
51913:	G.C.CC..G.	Mouse

HoxA13a:1

9488 9498 9505 9515 9522

9479:	AGTGCAGCCCCTGCTCTGCA---GCTCAGAATTCGTCCAG---CGCGTCC	tilapia
14019:	T.....C.....C.....	pufferfish
23800:	.A.....A..C---T...AGG...AG.....C..A	zebrafish_a
59388:	.A.....G..T..G..C---TG..A...A.CC.A---T..T..T	zebrafish_b
16519:	...T..T..T..TC...T---...A.C.....T..TG..	horn_shark
56363:	.A.....G...GCG..G...GC....GG.GCC...G.G	Human
51927:	T.....G..GGCG..A...GC....GG.GCC...G.G	Mouse

HoxA13a:1

	9532	9542	9550	9557	
9523:	CTGCCGTACGGGTACTTCGG-----TTACCCGTGCA---GAAT				tilapia
14063:	A..T.....T.....GAGCGGC---TAC.....T..T.---				pufferfish
23844:	A..TT..C..T..A..T.....AGGCGGTGGATAC..T..T...C---				zebrafish_a
59432:	T....C..T..A..T..T..CGGCAGC---TA.....T.---.G..				zebrafish_b
16563:	T..T..A.....T..GAGCAGT---TAC..T..C...C---				horn_shark
56413:	C..T..C.....CAGCGGC---TAC.....GCCC..C..				Human
51977:	C.....C.....CAGCGGC---TAC.....GCCC..C..				Mouse

HoxA13a:1

	9564	9572	9582	9589	
9558:	G---TCGCATCAC-----AGCAGCATAAAGTCGTGC---GGAG				tilapia
14107:	T.....-----TCG.---				pufferfish
23891:	C..C...CATGGGAGTGGTG..AG..TG.....A..A.---				zebrafish_a
59476:	C.....-----C.....A---				zebrafish_b
16607:	-AGC..C..T-----.....T.....C.....				horn_shark
56460:	..GGCC...C..C-----..A..GC...C.....				Human
52024:	..GGCC...C..C-----..A..GC...C.....				Mouse

HoxA13a:1

	9599	9604	9614	9624	
9590:	CGCAGCCCCCT-----CCGCGTATGGGGAGAAATACATG				tilapia
14139:	G.....T.....A.....				pufferfish
23932:	.C...T...TG-----CCTCTGGTT..AC..T..C..A..A.....				zebrafish_a
59490:	...A...A..A-----A.....A..A.....				zebrafish_b
16636:	.T.....T..A-----CCTTGTCTGG..TATCC..CC..C....T..				horn_shark
56492:	G...CGGCCGCCGCCGCCG...C..TC..C...C..G.....				Human
52056:	TG..T-----CGGCCGCCG...C..TC..CC..C..G.....				Mouse

HoxA13a:1

	9634	9641	9658	9668	
9625:	GACACGTCCGCCTC---AGGCGACGATT---TCGCCTCCCGGGCAAAGGA				tilapia
14174:	A.---GA..T.....C.---TA.....T.....				pufferfish
23976:	A..A..T..TAC.....A...ATAC..AG...A..C..C.....				zebrafish_a
59522:	T..T..TT.---T..A..G..G.---TC..T..T..A.....				zebrafish_b
16680:	-----C.....G..A.---A.....A..A..C.....				horn_shark
56542:	..T..CG...G..C..AGCT..C...G..G.---AG.....C..T.....				Human
52100:	CG...G..C..CGCG..C...G..G.---AG.....C..C.....				Mouse

HoxA13a:1

	9678	9686	9696	9706	
9669:	ATTTGCTTTTATC-----CAACGTATCCCTCTGGCCCGTACC				tilapia
14218:	...C..C.....G...C..C..T..G..G..C..T..				pufferfish
24026:	G....C..G..CT-----GC..CG...AA..T..A..T..				zebrafish_a
59566:	C..C-----AGGGC..CT..G.....T...				zebrafish_b
16721:	G..C..A..C..C-----A..GGT..CG.---G..G.....				horn_shark
56589:	G..C..C..C..C..ACCAGGGCTACG..G..CGGG..T..ACCA..ACC..T..				Human
52147:	G.....C..C..ATCAGGGCTACG..G..CGGG..T..ACCA..ATC...				Mouse

HoxA13a:1

	9716	9726	9736	9746	9756	
9707:	AACCTGTCCCCAGTTACCTGGACGTCCCCGTAGTGCCAACTATCAGCGCG					tilapia
14256:	T.....G..A.....A.....T					pufferfish
24064:	...A..T..G..C..T.....T..T..A.....C.AGG.A..A....G.					zebrafish_a
59604:	.G.....A..A.....T.....G..A..T..A..TG.GC.G....T					zebrafish_b
16756:	...GA.G....C..TT.....A..T..G..T..C..C.....T					horn_shark
56639:	.G..CA.G..TG.C.....TA.G..A..G.....GGGCC..G.G.GC					Human
52197:	.G..C..G..G.C.....TA.G..A.....T..GGGGC..G.G.GT					Mouse

HoxA13a:1

	9766	9776	9783	9793	9803	
9757:	TCTTCAGAGGCCAGACACGAGTCTCT---TCTGCCTATGGAGAGCTACCA					tilapia
14306:	C....G..A.....G....A..C..---G...T.C.....					pufferfish
24114:	C....G...C..C....T....T---A....G.....T.....					zebrafish_a
59654:	C....G..AC.G....T..A.....---A.....G....A.CG....					zebrafish_b
16806:	C.GGGG..AC.A.....CA.AT---AT.A..C.....					horn_shark
56689:	C.CGGC...T.GC.C....AC.CT.GGG...T..C....A.....					Human
52247:	C..GGC...T.GC.C....C....GGGG..T..C....A.....T..					Mouse

HoxA13a:1

	9813	9823	9833	9843	9853	
9804:	ACCGTGGACTCTCGCTTCCAACGGCTGGAACAGCCAGGTTTACTGCGCCA					tilapia
14353:	CC.A.....T.					pufferfish
24161:	G.AA..A.AA...GT..A.....G.A.....C....A...					zebrafish_a
59701:	G.....G.AA---CA.T....G....G..T.CA..G....C.G.					zebrafish_b
16853:	G..C...G.AA---A....T..G....TG.T..A..C.G..TT.G.					horn_shark
56739:	G..C...G.G....GC.....G....AA.G....C...					Human
52297:	G..C...G....GC.....G....AA.G....C...					Mouse

HoxA13a:1

	9863	9873	9883	9893	9903	
9854:	AGGAGCAGCCTCAGCCCGGACACATGTGGAAATCCTCCATACCA					tilapia
14403:	AG.G.....G.....G..CT.....					pufferfish
24211:	.A.....AA..AA.G...A..G.....G..G..A.....A.					zebrafish_a
59748:	.A..T..AA.A..T.AA.TAC.T.....G..T..C.A....AA					zebrafish_b
16900:	.A....A..G..AG.TACC...C.C.....GAG.C.G....A.					horn_shark
56786:	.A.....G.G....TCCC...C.C....G...A.TC.G..C....					Human
52344:	.A.....A.G....TCCC...C.C....G...A.TC.G..C....					Mouse

HoxA13a:1

	9913	9922	9932	9938	
9904:	CTTGTGCCTTACACA-----GAATCCATCCTTTACAGG-----AA				tilapia
14453:	-----T...TTCA.T.....				pufferfish
24261:	T..A.				zebrafish_a
59798:	-----A.G.T.C-----				zebrafish_b
16950:	TA.AGATAAA....ATTAACACGAGA..CTAG.G.AA..A...GGAC..				horn_shark

HoxA13a:1

	9948	9958	9968	9978	9984	
9939:	GCAGCTTTTTGACAATTTAAATCCGATAGTACACACAGCAAGTCC----					tilapia
14467:	--TTT.....G.GC...-GC...AT..C..A.A...G.C.CATGAACC					pufferfish
59805:	--T..C..-----GC.TTAT.GCC...A.T.AATC..T.A---C					zebrafish_b
17000:	.ACAT.C..-----G..GT.TA.A...T.TG.G-----T					horn_shark

	9994	10004	10014	10020	10030	
9985:	GTATGTATGGTGTCTGTAATACATGGCGTGT----TGATAAAATCTCCCTC					tilapia
14514:	.A...G.T.....GC...C..TAACCTGC.G..CAAGTTGT					pufferfish
59839:	AA...CT.AAG-----,-----A.A...G.AA..T.T					zebrafish_b
17029:	AGC..G..A.....-AT.....AGATTAT					horn_shark

	10038	10048	10057	10067	10077	
10031:	A--CTGTGGGAAGAACATCTCAAATGT-ATGCTATAACCACGATATAGCT					tilapia
14555:	G-----T...G.CT.T.C....T-----T.....TG					pufferfish
59868:	.GG.CC..A..A..G-----GA.....CTA...T.					zebrafish_b
17056:	-----TA.G.A.TT----T.TGCA.A..T..C-----A.G.C.AG.					horn_shark

	10087	10097	10107	10117	10127	
10078:	AAACTATATTTTAACCACAAATAAGCGACAATACAGCAAAGAGCGTTAA					tilapia
14586:	.GT.A.....-C.C.GTAATA..C.....T.T..TT..T.					pufferfish
59901:	.T-----G.					zebrafish_b
17092:	.CTT.....A-----C....A.TT....G-----..T.					horn_shark

	10137	10147	10157	10167	10177	
10128:	AACGACAAAATGAACATCAGGACGCTTTAAATGCGCTAAGTTGCGTTTT					tilapia
14625:	..G..GT..T-----GGT..T-----					pufferfish
59907:	...TGAT.TT.A..A.AG.A-----T...C.....					zebrafish_b
17123:	GTGC..T.GC.A..T-----...C...A.AA.					horn_shark

	10187	10204	10212		
10178:	CCTTTGAGAAAATTACA---CAAATACATTTTCT--ATTGTTTTATC--			tilapia	
14644:	-----TT.AAATGT.C.A.C.....G...C.CGC..ATGG			pufferfish	
59935:	-----			zebrafish_b	
17153:	TT..CATA.TC.CC...ATT.TC.CG.....AAC...A.A..T..TG			horn_shark	

	10227	10236	10246	10256	10266	
10221:	---AATCACTTATCATTAAAGAGTCAAGCCTGTCCAGCTGGTTTGAGGA					tilapia
14683:	--AG...TAA.CT.C.GC...TC.T.CTT.AAAAGG.GG.AAACCG.--					pufferfish
59935:	--AT..T...A..TC...-T.TTAA...TAGACTG.AAA.....T.--					zebrafish_b
17203:	ATAT..A.T...T.CA.....A...TC.A.A.A.C--					horn_shark

	10276	10286	10296	10306	10316	
10267:	TTTCCCATTTTCATCAATAACCTCAAATATCCTGAAATATTTGATTTGAT					tilapia
14729:	-----CAC..AG-----CAGAA...C..ACA.-----					pufferfish
59980:	-----CA..G..G-----AC..C.....					zebrafish_b
17240:	-----C.C.....GG..C...C..GA.C...C					horn_shark

	10324	10334	10344	10354	
10317:	T-----TTTTTTAAAAGTTGAATGTGTGTCACTCAGCTATTT				tilapia
14755:	-----G.G.GCA.....				pufferfish
60003:	-----CCGC.CACTT..T.A-----G.				zebrafish_b
17268:	.CCGCGACATTGC.GG...T...C..TT..T..CTG.TAAAT..C..GG				horn_shark

	10364	10370	10380		
10355:	ACATGTTCTTT----TTTTTAATTTTCGTGGG-----AGGGAA--			tilapia	
14772:	-----			pufferfish	
60023:	GTGCT..A..CGACG.A.G..T.....T..TTGCGCTGCCTC..A..CA			zebrafish_b	
17318:	.TGGTAAGG.			horn_shark	

	10395	10405	10415	10419	
10388:	-----ATTTTATTCTGAGAGTGAGTTTAGAGGCA-----GAT				tilapia
14775:	-----T..G.C.C-.....CACA.....C.				pufferfish
60073:	CACCATTGTGTT...AC...T..C.CCC-TA..ATTT.AT.CTCTGCA..				zebrafish_b

	10429	10439	10449	10459	
10420:	TATCACATGTTCTTTTGTCTCTCTCTCTGTCTTTT-----TTT				tilapia
14799:	C..G.GGGCG.....G.-----C..				pufferfish
60122:	C..T.TCATC.G.....G.AA.GA..T.T.C.TA...TGGATTGATC.G				zebrafish_b
17335:	C.				horn_shark
10629:	..TC...C.....C.....CC.				horn_shark
8249:	AC.....				Human
10572:	C..C...T.TCT.T...T.TC.....C.				Mouse

HoxA13a:2						
	10469	10479	10489	10499	10509	
10460:	TTTCTCAGACGCAGTGTCTCAGCCGGGGAGACTCCGGGTCTTATCGAC					tilapia
14824:	C.C.C...T..GACT.....A.....C..G..C...					pufferfish
24371:	...GT...A..C..T.GA...C...GG.A.C..C.TC..C.					zebrafish_a
60172:	ACC.AT...TA.C...AGGTA-----C..TGGA.CC..AGTA..T.					zebrafish_b
17338:	C...A.....TC..T..G..TC.TTC---C..TG.GA.C...T..G.					horn_shark
57562:	CG..TG..A.C..C...A.GA					Human
8259:	...T.TT..GA...G.....T.T.					Human
53102:	TC..C..C..TC.TTC---...G..A.C..C...A.GA					Mouse
10603:	.....					Mouse

HoxA13a:2						
	10519	10529	10539	10549	10559	
10510:	GTGGAAGAAAGAAGCGCGTGCCATACACCAAGGTGCAACTGAAGGAACTC					tilapia
14874:	.C.....G..A.....C.....G.....					pufferfish
24415:	.C.....G.....A..T..T.....G.....G..T					zebrafish_a
60216:	.A..G.....G..T..C.....T..T.....A					zebrafish_b
17385:	...G.....AA.A.....T.....T..A.....GT...A.....T					horn_shark
57583:	.G..G.....T..T.....T.A..A.....T					Human
53143:	.G..G.....T.....T.....GT...A.....					Mouse

HoxA13a:2						
	10569	10579	10589	10599	10609	
10560:	GAGCGCGAGTACGCCGCCAATAAATTTATCACAAAGGACAAAAGGAGGAG					tilapia
14924:	..A.....C.....G.....					pufferfish
24465:	..A..G.....T...A.T..C..G.....C.C..AC.					zebrafish_a
60266:	..A..A..A..T...A.A...G..C.....C.A..A..					zebrafish_b
17435:	...G..A..T..AA.....C..T..C.....C.A.....					horn_shark
57633:	..A..G..A.....A.G.....C..T..T.....C.....C.					Human
53193:	..A..G..A.....TA.G..C.....C..T..C.....C.....					Mouse

HoxA13a:2
→

	10619	10629	10639	10649	10659	
10610:	GATATCCGCTCAGACCAACCTGTCCGAGCGACAGGTCACGATATGGTTTC					tilapia
14974:	T..C.....T.....T.....					pufferfish
24515:	A..T..A.....T..C.....C..					zebrafish_a
60316:	T.....C..A.....A.....A..G..C..C.....					zebrafish_b
17485:	G..ATCA..A.....C..T..A.....A.....T..T.....					horn_shark
57683:	A..CAC..G..T..C..T.....G.....A..C.....C..					Human
53243:	A..CAC..A.....C..T..A..G.....A..C.....C..					Mouse

HoxA13a:2
→

	10669	10679	10689	10699	10709	
10660:	AAAACAGACGCGTAAAGGAGAAGAAAATCGTTAACAAGCTGAAAACATC					tilapia
15024:	A.....G.T..C.....AT.....C...					pufferfish
24565:	C.....G.....A.....G.T..C.....AT..A.....G..G..					zebrafish_a
60366:	.G.....G..G.....A..A.....G.G..C.....TAC..GGGC...					zebrafish_b
17535:	A..C..A..A.....G.TC...CT..A.....G..A..					horn_shark
57733:	.G.....GA.G..T..A.....A..G..A.C.....A.....C..CT					Human
53293:	.G.....GA.G..C..A.....A..G..A.C..T..A..C..G..C..CT					Mouse

HoxA13a:2
→

	10719	10729	10739	10749	10759	
10710:	AGCTAGTTTTCTTTTCTTTTCTTTTCTTTTACACAGTTTTTTTTGTTT					tilapia
15074:	TG-----					pufferfish
24615:	..T...C..					zebrafish_a
60416:	..T..AG.C..					zebrafish_b
17585:	.....					horn_shark
57783:	..T..A.					Human
53343:	..T..A.					Mouse

	10769	10779	10789	10799	10809	
10760:	TGTATTGTTGTTTTTGTGTTTTTGATGACGGACAAAATCTATGGGAAATA					tilapia
15085:	-----C..GCG.....G...					pufferfish

	10819	10829	10839	10849	10859	
10810:	AAAAAACTACACACACACACACGACACACACACACACACACACACACACACACAC					tilapia
15104:	..CTG.T.C-----					pufferfish

	10869	10879	10889	10899	10909	
10860:	CACACACACACACACACACACACAAGGACACACGGACACGTGGATTAG					tilapia
15113:	--TG.CT.....TT.T.....GGTT....C..CT.-----					pufferfish

	10919	10929	10939	10949	10959	
10910:	GGCAACCAGCTCCTTCATGACCGATTATGATTTCATATGTATGTAGGCAAA					tilapia
15147:	----..TGAA..T..TT.TTTTTT..T.T.A.....C-----..G					pufferfish

	10969	10979	10989	11002	
10960:	TGTTTTCCCGGAGCTCCCCAGACAACTTTCCGG-----ACCCACCTC				tilapia
15184:	..AC.....A.....T.TGGAT....A.C..T.ATGTCAAC.T.G.A.AT				pufferfish

11003:	11012	11022	11032	11042	11052	
15234:	C.TC..	-----	G..	-----	A....GC..	tilapia pufferfish
11053:	11062	11072	11082	11092	11102	
15266:	GACAAAATGTATAGCTGCAGTAGGCGTGACTTCTCCTTCTTCTTCTTCTT					tilapia pufferfish
11103:	11112	11122	11132	11141	11151	
15313:	GTTATTATTATTATTATTATTATTATTATTATTATTATT-CTTTTGGCATG					tilapia pufferfish
11152:	11161	11171		11184	11194	
15363:	CTCACTCTCAAAGTGACCTCAGGT-----GTGTGCGCCACCGAGCTAC					tilapia pufferfish
11195:	11204	11214	11224	11233	11242	
15410:	ACCTTTATCTAGACTACAACTTTTTAACGAGAG-TGATAAATG-GAAGAT					tilapia pufferfish
11243:	11252	11262	11272	11282	11292	
15447:	TCACAGGAAGTGACGGTGTGACGAATTTGGACCTTGGGGGATGTAAATA					tilapia pufferfish
11293:	11302	11312	11322	11332	11342	
15497:	TTAATCAATCCCGCTTCTTCTTCTTCTTCTTTTTTAAACCTACTCA					tilapia pufferfish
11343:	11352	11362	11372	11381	11391	
15533:	CATGTTTAACTTGTATGAAGTGTAGTCTTA-TCATATGAATCCGTGCTCT					tilapia pufferfish
11392:	11401	11411	11421	11431	11441	
15583:	CATGCATATCCAGTCCATGGTGCAATTCTTATTATCATGCTTAGATAATC					tilapia pufferfish
11442:	11451	11461	11471	11481	11491	
7000:	GTCATATGATATGACTGATGTGTGTTTCATGTCAATCATAGCTTTTATAAT					tilapia striped_bass
15633:	A.TCGG-----	C.....	A...GC..C.T.....	--C		pufferfish
62787:			...TC.TA...A.C.G.			zebrafish_b
59749:		...A.AT....A...A-----	A.....			Human
11492:	11501	11511	11521	11531	11541	
7001:	GTGTGTGCGTATTCTTGTGTTTGTAATAAGTGTAAGTAAATTCCGGC					tilapia striped_bass
15671:	AAA.....	C.A..GG....	T...A-----			pufferfish
62805:	T..G.GT..	A.A.A.A..T..	TA.A..T.TA..T..			zebrafish_b
59773:	A.....A.AC..GTA.ACA....	C.T..T....				Human

11551 11561 11571 11581 11591
11542: GTGATATCCAGTTGTGTGTGAGTCCCAATATGTCGGCGTTAAAGTCCGT tilapia
7051: .C.G..C.GT..A..... striped_bass
15702: ..C.....A...A.ACT....T.--G.....T.....T..... pufferfish

11601 11611 11621 11631 11641
11592: CCCATTAAAAATATGGACTTGTTGAATTTTATGTAAGTTTTATCCTTTG tilapia
15750: .T..A....G.G.....C.G.CT..... pufferfish

11651 11661 11671 11681 11691
11642: AGTTTATTTGAGTGATTATAGCTCATTTTAAATATAAACATTATTTTTCCT tilapia

11701 11711 11721 11731 11741
11692: TTAAAGCTATTTACTTTACTTAAGAACAAAAAGGCGAATTTTCCTTTTT tilapia

11751 11761 11771 11781 11791
11742: TACGAGATAGGAATTTAAAATACGGCGAAAGCTCACAGATTAGCTGCAGA tilapia

11801 11811 11821 11831 11841
11792: GACCCACAGCCTGGTTGTACAGTTATACTATCTCGTAGTGGCTTTGCTGG tilapia

11851 11861 11871 11881 11891
11842: GTTTGAGGTGAACTTTATCCAGAAATGCTATATACAAATTCTATTTAGAA tilapia

11901 11911 11921 11931 11941
11892: AGTCAAATATTTGAACTGTGCTGTAGACTCCCGTTTGGCTCTGGGATTAG tilapia
15921: ...A.T...AT.G..GT pufferfish

11950 11960 11970 11980 11990
11942: AGGAAA-TAAATCAGTTGAGGCTGGTCTGTGCTGAAATATAAGCTTACAT tilapia
15938:AGG..GT.A.....AAT..C.....T....GA.GG.... pufferfish

12000 12010 12020 12030 12040
11991: CGCCATCTAGTGACGACTGTGGAACATACTGTAGTGGTCAGGACATCCCA tilapia
15988: T...C.....C.... pufferfish

12050 12060 12070 12080 12090
12041: TTCAAAGCTTAGAGGCCTAAATAATAATAATAATAATAATAATAATA tilapia

12100 12110 12120 12130 12140
12091: ATAATAATAATCATCATCATCATCACATAATAGTAATAATAATGAA tilapia

12150 12160 12170 12180 12190
12141: CTTAGTCAGTAGCCCTAGTGTTTTAGCCTTGACTTTGACCACGCGGGAGA tilapia

12200 12210 12220 12230 12240
12191: ATAAACATACGCAGGAGGAACAAGTGGAACAATCACAATTTATTTTTTTA tilapia

12250	12260	12270	12280	12290	
12241:	TTGAAGACAT	ATTAACTTTT	GTCCGCAGT	GCTTACACTGGCTCGCTGCA	tilapia
55467:		AA..T.---	C..C...GCA.....C.TG		Mouse
12300	12310	12320	12330	12340	
12291:	CACTGGAAAC	CATTGATTTA	TATTTAAAGT	TTTTTCTGTGTGTTAAAGTC	tilapia
55500:	..TCA..TTT.TACAGA	.CTG.T.....C.G.ACA...T.....C....			Mouse
12350	12360	12370	12380	12390	
12341:	AAAGTTAAGC	GCGTGTGAAAG	AGCGCCGAGATT	GTGTGTGTGTTTTTTTTTA	tilapia
55550:	C...				Mouse
12400	12410	12420	12430	12440	
12391:	AACTAAAATC	AAAGCAAACAAA	AATGTATATTA	ATTTATATAATTTTC	tilapia
12450	12460	12470	12480	12490	
12441:	AAAAGGCCCA	TATATTTTCT	GGATTGATGAAT	CAGAAAGTTTGT	tilapia
12500	12510	12520	12530	12540	
12491:	AAAGTGTTCA	CTTTCGTTGGC	CTTTGTGAGAGA	ACAGTGAACACTTATGA	tilapia
12550	12560	12570	12580	12590	
12541:	GAATCCCCGT	ATCTGTTTGATT	ATGCTTTATTGTTT	AAGTAGGCTTACA	tilapia
28689:		G..G.TT.....A.C..G.T.T..A....G			pufferfish
12600	12610	12620	12630	12640	
12591:	TTGAAATTCC	TTTAAAAGATCT	AAGAGAATGCCT	CAGAAATTTCGACCT	tilapia
28726:	C...				pufferfish
12650	12660	12670	12680	12690	
12641:	ATTC AACCCG	ATGATTAGGACT	GGATTGCACAGAGTTT	ATTGAGAGGGTT	tilapia
12700	12710	12720	12730	12740	
12691:	ACGTGTTTGG	TGTCTTCCCGGC	AGCAGTGTTT	CACACGGAACTATTT	tilapia
12750	12760	12770	12780	12790	
12741:	TTCAAAACAAT	GAAAAATAAAA	CATGGAAATAA	CAACATATTTAATGT	tilapia
9036:		...T.C.T.CT....GT.....A..GA.			Human
12800	12810	12820	12830	12840	
12791:	GTGCTTAGAT	TTTATTTTCCT	AAATAAAATTT	GCATTAAAAAGGTCAGAA	tilapia
18593:				...C.CG	zebrafish_b
9066:	A.AAC..A....T.....TC.				Human
12850	12860	12870	12880	12890	
12841:	TTCTAGGTAT	GGTGTAATGTT	ATGGTGTACATT	GTGTCTGTCTGTTAAA	tilapia
18600:	..T..TA.G..T.A..T.A..T.A.-----	..A.T...A.A.T...T.			zebrafish_b

12900	12910	12920	12930	12940	
12891:	TTCTTATCCTTAAATATTTTCTTGAGAGACTACGTAGAGTTGAAGGATAG	tilapia			
18645:	..TA...TT.....G..T..	zebrafish_b			
12950	12960	12970	12980	12990	
12941:	ATACAAAAAAAATCTGCGTATTACAGTTAATCGCATTACCAGTCAGTTG	tilapia			
13000	13010	13020	13030	13040	
12991:	TCAGTCGTGAAATCCGGACATCGCTATAGCCACTGGGTCCTAGGTTAACC	tilapia			
13050	13060	13070	13080	13090	
13041:	TTAAGGTTTAAAAAATAATAATAAATTAAATATTTAAAAGAATCTTTAA	tilapia			
13100	13110	13120	13130	13140	
13091:	ATAAATATTTAAATGTAAATATCATTATCTATCTATCTATCTATCTATC	tilapia			
13150	13160	13170	13180	13190	
13141:	TATCTATCTATCTATCTATCTATCTATCTATCTATCTATCTATCTATCTA	tilapia			
13200	13210	13220	13230	13240	
13191:	TCTCTCTCTCTCTCTCTCTCTCTCTCTATATATATATATATATATTTCAA	tilapia			
5115:	A.AT.	zebrafish_a			
13250	13260	13270	13280	13290	
13241:	GGCGTATATATATGTAGATAGATAGAGAGAGAGTGATAATTTAAAAAATA	tilapia			
5139:	TATA.....A..T...T...T.T.A..G...	zebrafish_a			
13300	13310	13320	13330	13340	
13291:	ATGAATAGTAATAATAATTTAAAAATCTTATTTTACCTTATGTTTTTTAT	tilapia			
15987:	..TG.....G.--....G..T.....T.....	horn_shark			
13350	13360	13370	13380	13390	
13341:	CACCTAATGACGAGGATAATGTTGTTAATTTATTATTATTATTATTATTA	tilapia			
16022:	..	horn_shark			
13400	13410	13420	13430	13440	
13391:	TTATTACTTACTTACTATATAGTTTATTCATTAGCATAATCAATATCCTC	tilapia			
13450	13460	13470	13480	13490	
13441:	TTTGTGTTTGGTTATAGCCACAACCCAGTCGCTTAGTTTGACTGAAAT	tilapia			
13500	13510	13520	13530	13540	
13491:	TTTCAGCCTTATTTGTGTCATTTATATCCATGGGTCTAAAATCTACTTTT	tilapia			
20740:	..GC....C..TT...C	horn_shark			
10637:	.T.T.....	Mouse			

	13550	13560	13570	13580	13590	
13541:	TGGTCC	TTTTTTTT	GTTTGCTG	TTCCTTAG	GCTTTGAAC	AAGATTTTGATC
21678:		C	.AT.A.....	TAG..CA..	TG.....	ATC.
20757:	G.-----	CC...T...	TC.....	G.....	A.GT.A.A.	G..
10646:	CTT.T.....	C.....	TC..ATCT..	T..G..T...		
					tilapia	
					zebrafish_b	
					horn_shark	
					Mouse	

	13600	13610	13620	13630	13640	
13591:	AGCGAG	TTTAATTT	ACCATT	CATATGG	TATTTACT	TTTCTTTGCGTGTTA
21717:	-----	...T...	GTTT.....	-.....	C.	
					tilapia	
					zebrafish_b	

	13650	13660	13670	13680	13690	
13641:	AAAACCC	CACCTTAG	TAGGAT	GAAAACAA	ACATTTG	CTATGGATTGCATAA
					tilapia	

	13700	13710	13720	13730	13740	
13691:	AGTAAG	TCAACAG	TGGGCCG	GATTATG	AACCGT	TTTTTAAATGCTCTGTAG
					tilapia	

	13750	13760	13770	13780	13790	
13741:	TGCCAT	ATCTTGT	GCTCAT	GTCACG	CACATG	CCCAGCTGGCTGATCAGGA
					tilapia	

	13800	13810	13820	13830	13840	
13791:	CAAACAC	CAGAGCC	ATGTGAG	ACAGCAG	GGAATGC	GGTGTTACGTCTCTG
					tilapia	

	13850	13860	13870	13880	13890	
13841:	CCACG	TTTTTCT	GACGTC	GGCAGC	TGCGGGC	GCGCACGTGTTAAACGAGCA
17284:	.....	CGA.....	ATGG..	GAAT.....	C..C...	GA.CA.
					tilapia	
					pufferfish	

	13900	13910	13920	13930	
13891:	CATAGAT	GTGGAG	AAAAGT	TTTGAT	GTCTGACT
17333:	.TG.....	-...TA.....	G.....	A...AAAT	.CCGT...T
20933:				.C...G.A..	CC.GA.....G..C.-
					tilapia
					pufferfish
					Human

	13948	13958	13968	13978	13981	
13940:	-TCCAG	AAAAAC	ACACAC	AGGAAAG	AGTTGA	AGAGCGGAAG-----C
17382:	T..A.A..	T..AG...	GAG.A...	A---.C..	A.A.....	TACACTCT
20958:	-C.GG...	C.G.....	A...			
					tilapia	
					pufferfish	
					Human	

	13991	14001	14011	14021	14031	
13982:	TGCGG	AGCGGA	AAGTTG	CTTGTG	GCATTAC	CTAAGTGTAAGTTTATTGGCT
17429:	G.T.AC...	...T.A	CT...C	.TT...-	-----	G.T....T.-----
					tilapia	
					pufferfish	

	14041	14051	14061	14071	14081	
14032:	ACGAG	GAAGC	AGAGCG	TGTTTC	CTATTG	GCCTTAGTGAAAACCAAACAAAC
17467:	-TA.TC...	T.AC....	-----	T.....	TCC..G	.T.T...TAG...
					tilapia	
					pufferfish	

	14091	14101	14111	14121	14131	
14082:	ACGAA	AGTCC	CGCCTG	CAGCCT	GAGAAAC	AACGTGAGAGTCCAAAGCTCA
17512:	TTT--G	.....	CA..TT	.....	-----	
					tilapia	
					pufferfish	

	14141	14151	14161	14170	14180	
14132:	AAGCG	CAATG	CTCCG	CTATCC	CTCTCCTC	-TCGTGAGCCATCTTTGA
17534:	-----	.G...	TT..T	.TG..G	.AG.AC...	G..G.G...G
					tilapia	
					pufferfish	

14181:	TTGGACAGCCACACGACCGGCTGGAAAACACCGAGGCTGGCCCGCACTG	tilapia
17569:	CC...-----TG...-----G...-----	pufferfish
14231:	TGTTCAAAAATTGAATTCTGCTGCCACACTAAGGATAAAAAGTGTATTAC	tilapia
17589:	-----G...TGC.....CC.....C..A.....	pufferfish
63832:	..T...G.C.G.....C.A....CACT...A.AA.....	zebrafish_b
14281:	AGCTTGT-----TTTAGAGACTTAAAA-----	tilapia
17634:	..T.AA.AAACTCCATCAC....AT..GCG....CTTCACATTTTTCCT	pufferfish
63875:	.	zebrafish_b
14303:	-----AAGGTTTCAATCAGCGTGTCTAG-----AATGTCAAA	tilapia
17684:	TGCTGT.TAT..GA..G..TTC....T..ATTACGATTATC...T.T...	pufferfish
14336:	TAACTAGAGAATG-AGTTTGTAAAGCGCAGATATTTAAAGGCGT-----	tilapia
17734:	A...C.ATC.C.ATTAC...CGT..TCA.A.C.C.C...CA..CCAAAC	pufferfish
24700:	GA.-..C.A.....TAT...CG.....	zebrafish_a
14380:	--TTCTATTTTACTATCAGCTTCTAATTTACAAAGTGGGACGTAATGATA	tilapia
17784:	CG.G.C....-----...T...T.CC...GA.-----G..	pufferfish
14428:	AAAACAAAAACAAAAA---CAAACAAGCA----ATG-----GACA	tilapia
17814:	C..C.G....T.GCG.CTC.....GC..TCAG...CATTTAAAAT...T	pufferfish
14461:	AAAGTCATTGTTAGCGTTTTCTTTAAATAAAAAATGCGTCCTATAAAATA	tilapia
17864:	...T.A....CCT.-A..G.TG..G.CC..TG.G.CTA.AT.T.CT....	pufferfish
14511:	ACAC-TTGACACTTTGCCATGCTTAGATTGTAGAAACTGTGTTGTACACG	tilapia
17913:	C...AA..GGG.CCG.GTG..G..GA.-----CAC...A.	pufferfish
14560:	ATGCACAATATCACTCCACGCGCTGTCAGCCG-TGCTCTTTACATTGACC	tilapia
17948:	.G.....GGGC.....A.AT.....	pufferfish
14609:	TTC-----TGAGCGTAATGGAGGACAGGCCTGCAACCTTCACTTAGC	tilapia
17989:	...GCTGTGTT..T....T.C.....CGCTC..A.....G.C..T	pufferfish
14651:	CTGCAGTGCAGCTTTCAAGCTTGATAGCGTGATTTTGGAAGATAATCTTG	tilapia
18039:	.AA...A.....C-----G...A.-----	pufferfish

14701:	14710	14720	14729	14740	
18060:	-----	.T....	A..A...GA...G...C..CAATGATCG	.A.C.GA.	tilapia pufferfish
14741:	14748	14758	14768	14778	14788
18103:	.AG...	T.A.A....	T.T.....	G.....	C.....GTG..G..CT.
					tilapia pufferfish
14789:	14798	14808	14818	14828	14838
18153:	..				
					tilapia pufferfish
14839:	14848	14858	14868	14878	14888
	GTTTCCTGTCCGGATATCAGATCATCTCA	TTTGGCTTCAAGTATAAAATGC			tilapia
14889:	14898	14908	14918	14928	14938
	CCCCAAATTTACTGTGTTCA	TTACACGAAGGGTATACAGACTAGATTTAAG			tilapia
14939:	14948	14958	14968	14978	14988
	AAGGATGTACGCGGCAAGTATGCGTCATGGATCGCAGTCA	AAAGCTGGCCA			tilapia
14989:	14998	15008	15018	15028	15038
	CTCGTTTGTAGGTTTGCAAACACCCCCAGCACAAAATTG	TTTCAATTTTAAA			tilapia
15039:	15048	15058	15068	15078	15088
	TGGTGGTCAATAATAATAAAAGATCATTATACATAATATG	TCAATCAATT			tilapia
15089:	15098	15108	15118	15128	15138
	GTGTGATCAGTTGATCTGTGATAACTTGAATTCTTATTACGTGAGCAAGT				tilapia
15139:	15148	15158	15168	15178	15188
	CGAAAAGACTCCACGGAAACGAAGGAAATACATGTTGTTGTTGTTGTTTT				tilapia
15189:	15198	15208	15218	15228	15238
	TTAGAACCTGCTGTCCTTCCCTTATATAAAATAGCAAATCCACAGAATCAT				tilapia
15239:	15248	15258	15268	15278	15288
	CTCACCTGATTTAGAAGATTCATTTATAAGTGAAGCAAATTGCGGGAGTT				tilapia
15289:	15298	15308	15318	15328	15338
	GCACATTTGTTTGTGAATCCACGTAAAGAAAAAAGAATTAAAATCCAC				tilapia
15339:	15348	15358	15368	15378	15388
	TCGATAGTTTAAAGTATAATCCGTTATTTACGATGATTTGGTAACCATG				tilapia
15389:	15398	15408	15418	15428	15438
	AGGGCCATTTATATTTGTGAACGAAAGTAGAATATTTGAAGTCGCCCAT				tilapia

	15448	15458	15468	15478	15488	
15439:	ATTATTTGAGCTTAGATACAACAATCCCCCCCCGCCCCCCCCCAAAA					tilapia
29167:		GAT.....C.....TG..				pufferfish
7538:		...C.....C.....				zebrafish_a
21905:		T.A.....				horn_shark

	15498	15508	15518	15528	15538	
15489:	AAAGAAAGAAAGAAAGAAAGAAAGAAAAGAAAAAGAAAGAAAC					tilapia

	15548	15558	15568	15578	15588	
15539:	TCTGCGTGGCATCCGCAAGATGTAACTTCTGGAGAAGATCATTTCAGGG					tilapia
25285:		..T....ACA				zebrafish_a

	15598	15608		15616	15626	
15589:	CCGAGCAAGCTGAAAAAATATAC-----AACAGAAGAGGAAAA					tilapia
25296:	T.A.A.C.CA...G...T.GG..TATTGAAATTGA....A.CA.CA...C					zebrafish_a

	15636	15646	15656	15666	15676	
15627:	TACTGAAGGTTAATGTGGTGTAAAAAGCGACTTTTTTTTTTTAGAAAGA					tilapia
25346:	A.AC.....CAT..G.....AA.....G.....					zebrafish_a

	15686	15696	15706	15716	15726	
15677:	AAGCAAGAAAGAAAGAAAGAAACGCAGGTCGGGATTTCGCTTATTTGACG					tilapia

	15736	15746	15756	15766	15776	
15727:	CACACTGCGCCTGTTTTTAGACCCCAAATATATTTCTCTCTCTCCTCGTT					tilapia

	15786	15796	15806	15816	15826	
15777:	TAAGTAAATTTGAACTTTTATCAAATTTATCAAATTTTAATTTTATCA					tilapia

	15836	15846	15856	15866	15876	
15827:	AATGTCCTTTCAAACGATCCTTTAGATGGAAGACGAGCTGTTTTTTTC					tilapia

	15886	15896	15906	15916	15926	
15877:	ATGTTGTGGGAAATCGCAACTAAACACTGGAACTCGACCACAGATCTGGA					tilapia

	15936	15946	15956	15966	15976	
15927:	GAGCTGGTTACCTATAAGAAATAAAATAACTAAGATCTTCTAAGAATAGT					tilapia

	15986	15996	16006	16016	16026	
15977:	CACAATTTCAAGATCTGGGTTTAGTTGCCGAATGCTTTTAATGTAAGGAAT					tilapia

	16036	16046	16056	16066	16076	
16027:	ATTGAATTTTCTATTTCAATTCTATTTGTACTTTGTGTGGTGTTTTT					tilapia

	16086	16096	16106	16116	16126	
16077:	TTTTTTTTTTTTTTTTTTTTTAAATGAAGATGAAATCCTTTAATTTCCC					tilapia

16127:	TTTACTCGCGTCTTGTTCTTTCTCGTATTCCTTGTTATTTCTTCAAATG	tilapia
16177:	ATCCCCCTTTGTAAATGTTT-GTTTATTCCCCCACTACAGTCCACTTTAT	tilapia
18881:	.T.....AA.G.AA..C..AT....A.T.G.....G.....	pufferfish
16226:	GTCC-TTTTTTCTAGTCCCCTCCTCCTGGCGCCTTGTTTCTCAGGACAC	tilapia
18929:	..T.G....G..C.TAT....GG..G...A.....CC.AA.-----	pufferfish
16275:	CCTCTGCAGGCTAATCC-AGCCTTGTGATTCTCCCCTGACTAGCCGGAGG	tilapia
18970:	-----A..GT.G....G...T-----	pufferfish
16324:	CGCTCCCGTTGACCGTGGAGTTGGTCAGTTTCGCTCTGTAGCCCTTGTGT	tilapia
18991:	AA.....T...TATGCA.G..-AC..G....C.....	pufferfish
16374:	GGTCCGCCAGGC--CCCTCTGTCATC-GCCCTCGTTTCTGTACCTGTGG	tilapia
19040:	T...CT.T.....CC.G.AT.A.A..C..C.....	pufferfish
16421:	ATAAATCAACAGATGTTTCGCTTAATCAGGTTACATTTGCTGATATATTC	tilapia
19090:	..C...A..T---A..TTAA.....T...TA...A..C..AC.GC.A	pufferfish
16471:	CAGCTCGTTCGTTTGTACGCAACCAAGTGCGAGCTCTGATTGTTTCATGT	tilapia
19137:	-----C..A.GATG...G.CAA.T.A-----G	pufferfish
16521:	TTCAGTCTGATGGTTTTATAATCCCCCAGCAAGGTGGTGGCGG--CTGA	tilapia
19161:	.C.G..T...GA....G..G...TAA.G.-.....-A.C...ATT...C	pufferfish
16569:	GCAAGCCCATGTACAATTCAAGTTCAAAAACACTTTATATATTAATGTAG	tilapia
19209:	T.T.TTT..-GG.T.....TC.-----	pufferfish
16619:	TAGGATTTTTTAGGAAACACAAGCAGACGAATTTGCAG-----TTTG	tilapia
19239:	-----CCC.GC.A....T..-----	pufferfish
27053:	..A...A...A....A.A.T...C....AAAATATTT...A	zebrafish_a
16661:	AAGAAGTGC'TTTGGCGAAACAGAAAAAAGGAAAAAGGAATGATTAGTCT	tilapia
19259:	-----C...A.TT..A.T..T...T.T.C.....	pufferfish
27097:	..AG..AAA...CATA..GAC..G.TT..ATC.T..AAG.C....A.T.	zebrafish_a
22528:	GA..C.....A..G..AA..CAC...T.AG	Human

16711:	AGGC-----TAATCTATTGGCTATTTTGGTAGTGCAGTT----CCCGGCT	tilapia
19286:	-----C.T.T..C.T..A...CACAA.T.TT.C..ATCA...AAT.	pufferfish
22560:	.A..CCTAG.C..T.T.....T.C.	Human
16752:	GTTTT-----ATGCGCAATGAAGCAAAGTGTTTAGTAAAATTGTGTTTT	tilapia
19327:	.G...GGGAAA.C..CG...C.CC..CC.-ACG....TTT..C.G...AA	pufferfish
16796:	ATTGAAAATATAGGAACACGCTCATTAAAAAAGGCACAATCAAACACCTG	tilapia
19376:	CT..C..-----AAATT.G...T.-----G...G.T-----	pufferfish
16846:	TGTTCTTTTTGTGATGGTCGACTGTTTGTGTA----TCTGTTTAGACTAA	tilapia
19414:	-----A.A....C..T.TC.ATCCA...G.C..C.C.C	pufferfish
16892:	GGAAGACTAAAGATTTTGAGATGAAGAATCTAGTCAATAGATCCTCTGAG	tilapia
19448:	AA..AG..GTTTCC.G.TT..G.T..GG..-.....AG..T.C..	pufferfish
16942:	GTGCAGGTGTGGTGGCCCATTTTTTCAGCCACAGAATGAAAACAAAACTA	tilapia
19497:	AC.....T.ACG...T....T.A.G.....C.---	pufferfish
16992:	GCCTGTAGTAAAGCTTTGAGCTTTTTCTTTTCCTTGAAGACTAAACTAC	tilapia
19544:	-----AA.C..G..G.....G.CG....G.	pufferfish
8185:	C.CT.AA..A...CA.G.....A.A.AC.A.AC.G..A..G	zebrafish_a
17042:	AGGAGGTTTCACTGCAGGAGATTGAATACTTCTATTTAGCCCCCTTTACG	tilapia
19577:	G....G.CTTT.T.GA..C.C....CG.G.T.G...G.T.T.....A	pufferfish
8232:	.AA...G....T.	zebrafish_a
17092:	GCCTAT---AGGGCCTACCTGACAGGGCGTTAAACTGTACTTTCAGATCC	tilapia
19627:	G.CCACA.....C.G.-----CC.....A.C..G....	pufferfish
17139:	TCCCCACACTTGATTGTTTACTTGTTGTCTGACAAAGTTTATGGCACAA	tilapia
19673:	.G.T.....A...-TGG..G....CA..GTGC	pufferfish
17189:	GGATTGGGCAATCTACACGTCGCATTCTCTTCTGACTAAAAAAGAAAA	tilapia
7523:	C..G..G	striped_bass
19722:	C.GG.....C.G.....C.....AG...	pufferfish
57266:	...C.....AA..C....C....	Mouse

	17250	17260	17270	17280	
17239:	AAGAAA-----	AAACAATGCCAACTATGCCACTATGCCAAACCAAG			tilapia
7536:	..AT.....	T...A.TGG..GA..T...CT..T.TGT...GA			striped_bass
19757:	...T..TTTCCTCT...	A.C.....GGA-----TA.T.TTT.GTATT.A			pufferfish
57290:	..T.....	C...A..C.....			Mouse

	17290	17305	17312	
17281:	GACTCTTATTTTGAAGTG-----	TTGCTATG---TTATGC		tilapia
7578:	AT..A..T...AA.G...			striped_bass
19802:	ATTG.A....AG..C...ACTCAAACACGCGCGCCT..T..CGT....C.			pufferfish

	17322	17331	17341	17345	17355	
17313:	ACAATTTTCTTTAA-TTGC	GTGTTTGTTC	T-----	AAAAAAGCAAATCC		tilapia
19852:	...T.AA.G.A...T....	CAAA..A..T.AGGACA....	T..TGG..TT			pufferfish

	17365	17383		
17356:	AGTGTGAGTTTATACGTG--CTGTGTGTGTTAAAG-----			tilapia
19902:	G.CACTCT.G..CG.A..AAT.....A..GG.G.GTCTGGGAGCCACAC			pufferfish

	17394	17404	17414	17422	
17389:	----AAAACACAACAAGGAGACTTTAAGGTCAG-----	AAAAA			tilapia
19952:	CAAC.G.TT....T..AATA.A....TT...ACATATGTACTGT.GC..				pufferfish

	17437	17447	17457	17466	
17423:	ACCAGTG-----CCCTTGAGTAAAGTCACTCGTTTGTCTGTCTTGGTG-T				tilapia
20002:	...T..AAAGAT.T.A.TG.A....GTTT.AT.G.TC....T....G.T.				pufferfish

	17476	17484	17493	17503	17513	
17467:	CAAATCTATTGAA--TAGTCT-CACGTGGTTATGTCTTATGTCCCACCCC					tilapia
20052:	T.TT.....TT.CC.C....C..G.CT.C.TC..G.C.....-G..TT					pufferfish

	17523	17533	17543	17553	17563	
17514:	CCTTTATTATTACTACTATTGTTATTATTATTACCATAAAAAATATCAACT					tilapia
20099:	.T.....G.-----	AT...CG.C....C				pufferfish

	17573	17583	17601	17611	
17564:	AGATGTTGACTGTGGATACTAGGAAATCT--GAAATCTAAGATATCGCTT				tilapia
20123:	-----TAA.A....CACGA....C.AC.C....ATGG.				pufferfish

	17621	17631	17641	17651	17661	
17612:	TGAGCACGAAGTCACACAAGGAGTGTGTTGTTTTCTTCTATTAATAAT					tilapia
20161:	G..AT.TA..T....					pufferfish

	17671	17681	17691	17706	
17662:	TTAGATAAAATCTAAAAACCACAGCAGATCATTGGGG-----	CCCACACC			tilapia
20181:	.A.AT.TG..C....-TG....G.C.A...AAA.AACTTA.TG.G.T				pufferfish

	17715	17741		
17707:	TCTAA-TAACAGACATACT---GTTAGTT-----	GCTTGCAGTT		tilapia
20226:	.A.G.T..G.GC.A..G..GAA.....TGACTTTTTCAA...AG.A..			pufferfish

	17751	17761	17771	17781	17791	
17742:	ATAAATTCACGTTATCAGGCAATCTTGCGACTCAAGGCATGAGTGGATGC					tilapia
20276:	.C.GCC.T..A.....G.....TA..C...A..C..AA.A..					pufferfish
29285:					T	zebrafish_a

	17801	17811	17821	17831	
17792:	AAAGGCAATTAAATAGAACTCCATCCGGGGCAAATGGAGCCCT-----				tilapia
20326:	T..A.....-G....C.....G.GC.G.....-----				pufferfish
29290:	.G.A..G.C.TTG.GA.....T.GAAT.G.T.GCGTGGC				zebrafish_a

		17837	17847	17857	
17835:	-----TTGCTCTTTGTGAAGGACCCCT				tilapia
20368:	-----G...C..GA.....A..				pufferfish
29340:	GTTTGTGTTTCATTCTCTTTTTCAGAC....G.GG..G.CG.T.G...G.				zebrafish_a

	17865	17875	17885	17895	17905	
17858:	CTCT--CCCCGAACTTGAAGTCGACCGAAGAGACAAAGCTTTGGCTTTGA					tilapia
20391:	.C..C-.....T.C.....A.....					pufferfish
29390:	.C.CCT.....C.C..C...GT..G..					zebrafish_a

	17915	17925	17935	17945	17955	
17906:	GAGCTTTTACGCAACGCCAGACGGCAGTTTCTTGACCAAAAACAACA					tilapia
20440:	G.....TG..TT....C..G..G.GA.....G.CG.C					pufferfish

	17965	17975	17985	17993	18003	
17956:	CACGAAAGGCGGACTGAGGATCCACAGAAC--GACTTCCTTTAACCAAAG					tilapia
20487:	A.G...T....-T..GA....A....CTCA..T....-GGA					pufferfish

	18013	18022	18032	18042	18052	
18004:	CACATTTGACATAAATCT-GGCTCTCAGCTCACTTGTATCAACTATTTTA					tilapia
20525:	G.TG....GC.A.AA...T.A..T.--T.AAA..T.CACG.....					pufferfish

	18062	18069	18079	18089	18099	
18053:	TGATCACTGTCTT---TGTTCAAATTAACAAAATGTGTAATAATTTCTAG					tilapia
20573:	AA.A..ACT.T.CAAA.AA.....T.-----					pufferfish

	18109	18119	18129	18139	
18100:	ACATTTCTTAGAGACATGCCGATTTATTCAAAGGAGAACTCTTACCT---				tilapia
20608:	..C..GA.G.A.A.A..T-----T.....ACG				pufferfish
66621:				...A.....	zebrafish_b

	18156	18166	18176	18186	18196	
18147:	TAGCTGTGTACAGACACATGTTTCTATGTTGCTGAAATTCCTCAGCTGCT					tilapia
20641:	...GAT.TG.A.TT.T.T..GA.A-...CCA.....A...A..TT....					pufferfish
66630:	...AAA...GT..T.....T....C..A..A..					zebrafish_b

	18206	18216	18226	18236	18246	
18197:	GACTTTGAGTCAGTGTAGGTGGCGACTTCCTATCACGCTTGACCGGTTTT					tilapia
20690:	T..CA.....C.....G..A.....					pufferfish

	18256	18266	18273	18283	18293	
18247:	GTGGTGTCTGTCTGGCTTGAGGGG	---	AAAGGCGCACAA	GAATACTATAG		tilapia
20740:	C.....CG.G.A..AAA..A..A..GC.....G.....					pufferfish
27621:						horn_shark
68109:					..C.G.C.A.A	Human
63862:					..C.G.C.A.A	Mouse

	18302	18312	18322	18332	18342	
18294:	CAGCTA-TAAAAACCCAGGTCTGTGCAGTGCTGGCTTTTGTTTTCTGGG					tilapia
20790:	-.....G.....A.....C.....					pufferfish
30992:			..T...GT...GCAG.....A.....AAT			zebrafish_a
27623:	.T...GT.....C.G.....AAACT.-AA.C.CT..C...C..A.A.A					horn_shark
68120:	.T.....-.....C.G.....CT..AA...TT..C.....A.A					Human
63873:	.T.....-.....C.A.....CT..AA...TT..C...C...A.A					Mouse

	18351	18361	18370	18380	18390	
18343:	CA-TCCTGTCCTCAATTACAG-CTTAAAAGCTTCGGCACAACTCTTAGAA					tilapia
20839:	..-.....G.....-.....A.....G.....					pufferfish
31022:	AG-C.....G.....					zebrafish_a
27672:	.G-.T...AT.T.....T.T-TA...GAACG.T.T...TG.GCCG...					horn_shark
68169:	.GCC..C.GGT.....TG.T.....CCTAAT...G.GCA...					Human
63922:	.GCC..C.GGT.....TG.T.....CCTAATG...G.GCA...					Mouse

	18400	18410				
18391:	TTTGTCTGGATTGACCGAGAGCGGAGCG-----					tilapia
20887:	A.....T.....					pufferfish
27720:	C.					horn_shark
68219:	T..CC..C...C..G.....G...AGCCCCGCAATGGTGGCGCCT					Human
63972:	T..CC..C...C..G.....G...AGCCCTGCAATGGTGGCGCCT					Mouse

	18428	18438	18448	18458	18467	
18420:	-TGTGACCGCAAAGACACTCAAGTTGTTTGTTGCCCTGCAATTTA-TCCA					tilapia
20916:	-A.C.GTG.....A...GGAC.....CT.....GGAA.					pufferfish
68269:	T...T.TG.....T...G..ACCC..CA..					Human
64022:	T...T.TA.....T...G..ACCC..CA..					Mouse

	18477	18485	18495	18505	18515	
18468:	TATTAAACTGCCTGTAA--GGGTCGGGAGCGATTTCATATCATGTTTTTTC					tilapia
20965:	A..A...A...CAA..AG..ACAAC.TA..GC...G.CT..A.A...G-					pufferfish
26333:					.....	Human

	18525	18535	18545	18555	18565	
18516:	TGTCTTTCTTTTTGACACAATCGCTGGGTTCCTAGCATTAGTTGGTTCTCG					tilapia
21014:	---GA..TA.....T...GGAA.GC-----G.GG.....T..CA...					pufferfish
26340:	.AC.C.....C...T.CTTG.....CT.G.TGG.GGC.G.....TAGA					Human

	18575	18585	18595	18603		
18566:	CACAGTATTATTAGTATGTATGATATTTCA-----AGGTCATG					tilapia
21055:	.GAC..CG..G.G.C---.G.....AT.GGTTTTTATTAT...TGC.					pufferfish
26390:	T....					Human

	18613	18623	18633	18643	18653	
18604:	TTTCACATGTGCCATCAAGAGCCCTCGAATCCCTATATGCACATTGAGC					tilapia
21102:	A.....-.....T.G...A...A..T..G..C.G..					pufferfish

18654:	AGTGGGGGCAGACCAGCCGCGGCGGTCTTAATCCGAGCTCAGGTCTCTCA	tilapia
21141:	T...T..C.G.GA.....G.....AG....T....G....	pufferfish
18704:	TTCACAGCACATTAGAGTCAGGTTGCAGCCTCTCCAAACAAAGCTCCACG	tilapia
21191:	A.....A.....T.....G....G.TTC	pufferfish
18754:	GTGGCCTCAGAGCAGGGAGCCGGGAATGTGCACTGTGGCGTGTTCCTCC	tilapia
21241:	.G.A..C-----A.TT..TT.A.CAA..A..C.G.A.A.A-----	pufferfish
18804:	AAATCAAATAGCAGAAA----TGTATTTACAGAATTAAACACATTTCTT	tilapia
21280:	.TGA.....C...CC.GCGCC..C.....C.....AT..	pufferfish
18850:	ACCTTGCTTTACTTTAGTTTCTGTGAGGAATAGACCTTTATTCTAAGGAT	tilapia
21323:	GT..G.....T.....-C.CAG.AC.C..-----AA..	pufferfish
18900:	GTCTATAGGTTTTCTCTCCATATGACAATCTAGACCATTGGATTATCTA	tilapia
21357:	.AT..A.T.....-----	pufferfish
18950:	CATCCAATACTTAAAAATATTCATAGAGGACATTAGTTACTAACATGTTT	tilapia
21369:	-----G.T.....-----	pufferfish
19000:	CGAGCTATAACTGTAAAAATACTGACAGCTCTGTTATTTTAAAATAATCC	tilapia
21377:	-----AG....G.AT.C.....T.	pufferfish
19050:	ATTAATATGTGTTTAGAAACGACTTTACACGCTGGTGAGAATTACGTAAA	tilapia
21400:	...TCATA..C..A...T-----A.A..A.-----	pufferfish
19100:	TGTTTTTCTTTGTTTCGTCAGGCTAAAAATATTACGGAACCTGGTGGAAGTT	tilapia
21428:	-----AC....T.TATG....GG.C..G..T..CA.-----	pufferfish
19150:	GTTATTTGTCAGTACAGAATGATATCTAAATTTTCATGTAAATTTCTGGAC	tilapia
21461:	-----A.A.C.A..T...GTG....C.....G	pufferfish
19200:	GCCGTCTTCTTACTTAACAGTGCACATTTGGATACATATTTGGACCAAAA	tilapia
21494:	..T..G..G..T...TCA.ACA..GG.AGAA...A.C...CAC.T.C...	pufferfish
19250:	TGGTGCGAGATCGCCATGCGTAAAAGCGGAGCGAGCTTGAATGTTGCAAC	tilapia
21544:	CAT.AAA.A..A.T.G.....A-----	pufferfish

19300:	TTTAAAAGCTGCCAGCAGATGCATAAAATTGTAACTTGAAGCAAAGCAG	tilapia
21573:	-----G.G..G-----C...CC...C-----	pufferfish
19350:	AAGAGCGAGGCGAAACCCGTTAAAAATGGAACAATGTT-GTTATTTCAGCA	tilapia
21599:	---G...G.AT...GTTGA..TT..GACAGG..GG...AA.....TCAA.	pufferfish
19399:	ACAAGCTAATGAAATATGGACATTGAAGCA-----TTCTGTAT	tilapia
21646:	-----A.....A..A..GCCGAAGACTGG...A..TA	pufferfish
19437:	TTAGGCA---ACAGACTTTAACTATCAGCTGATGAGTATTTTTCTCAACA	tilapia
21684:	...AAG.TGT....GT..G.T.C-----C.C....A.TG..	pufferfish
19484:	ATTCATCGCTGTTGCTTGTGGAGTATCTGTCAGTTTCCTCTAATGTTGTG	tilapia
21721:	.A..T..-----A....T...T-----...C	pufferfish
11454:	....	Mouse
19534:	GGTACGTATTAAGTATCACAATAATTTCAAGTAAACGCTCTTAATATTATT	tilapia
21744:	CTGCTTCT.A..AA.CAGT..A...G..GCAAT..-----	pufferfish
11458:	T..GT..T.....CTG..T--...T.TC.T.GTC.AC.TGG.C.T..	Mouse
19584:	ATTTGATAATCCATTAATGGCGCA----AGGTTTTATACACACTGTGT	tilapia
21779:	-----C..A.CAAA.CA...CCTT.TTA...-..	pufferfish
11506:	T.A..AT----CACTT..CTGGGCAA.....T...T.T.A.	Mouse
19630:	GTTTTATGTCTTGAAGTTAGAACTGTTCCCTCGACCTATCTATTTTAAAG	tilapia
21813:	..GC..A.A.CCCG.ACC.A..TA.T.GAA..A.GACT.T..CAC..---	pufferfish
11552:	...A..CA.T..A.	Mouse
19680:	ACGTTTTGAATTTATCCTGTCAAATTCAGTTTGGTCTTATAA-----T	tilapia
21860:	.T....AC.....CC-----C.....T..TG...CATC.C.G.CGTCC.	pufferfish
19725:	GGTCTAACACAAGGCTGTGGACAGCTGAAACATTAGCCGCTACTTTGAA	tilapia
21907:	...AG.....-----ACG...T.....	pufferfish
19775:	CATGACCCTGATAACCAAATGCCCACTCAGCCAAATGCTGT-GCCGTAAA	tilapia
21953:	A.....AG.....CA..T.....	pufferfish
19824:	AGTCACCTAATGATGACCACTCGGACATTTCTAAAAGCGGACTTTACAGA	tilapia
22003:	--C....A.....C.TG...AC.....CT--...C.A.....C.G...	pufferfish
10561:	....	zebrafish_a

19874:	TAA----	GCTGTTTTCTTCCTC--	TGATAATGTGTTGTTCTGAGTTATATA	19879	19889	19897	19907	19917	tilapia
22049:	...CCTCT....	C.C....T..-----	CAG..C.AC.....C.-						pufferfish
10565:	AC.-----	A..AA.ATG.AT.C.....	TG.T..T.....A.						zebrafish_a
19918:	GTTTCATATTAGTATAAATTGGATAGCGTTTGGACAATGTAGTGTTCATGAT	19927	19937	19947	19957	19967	tilapia		
22092:	..C.TC.G..A.-----	CCC..TTT.GT.....A....					pufferfish		
10611:	...T....C..						zebrafish_a		
19968:	CCTTCTTTTTTTTCATTTTGCTATTAAAAAACCTTCA---	19977	19987	19997	20014	tilapia			
22127:	-----	C.GG...G...-----	GAG..GGTT...T			pufferfish			
20015:	CCCCC-----	CAGAAAGACTGAAAAGTGATTTTCAGCATCTGATGTGTAT	20027	20037	20047	20057	tilapia		
22155:	T.TG.ACAAAAT...TGGA.A.AT.G.TGA...AT.AGGA.A...T..AT					pufferfish			
20058:	AAAAGTCTGCATAAAACTTTGACTGCAACAGGCAG-----	20067	20077	20087	20095	tilapia			
22205:	C.G.A.T.T.-----	T.....-T.G.T..A.TTTAAATACTTCC..G				pufferfish			
20096:	CCATTTATGGTCCATCATTCTCCTG---	20105	20115	20122	20132	20142	tilapia		
22249:	T.T.AA.C.T.TT..TG.G..T.C.CGA.T.ATT..AT....GGT.....					pufferfish			
20143:	TTATTTTAAAGCAAACATGGCGATAAAAGCACCAATGTCAAGCTTTAGGA	20152	20162	20172	20182	20192	tilapia		
22299:	..G...G.C.CTC.G....AA..-...TCTGT.....C.....G...-					pufferfish			
20193:	CACACAGCAGTCATGTCTCTTACACTCCTACACGCACA-----	20202	20212	20222	20232	tilapia			
22347:	-...G.....T.....G.ATG..GCTCTCTCTC.C					pufferfish			
12903:	..T....AC...TA..T.-----					Mouse			
20233:	C-TCTTTCTTGCAAGCGTACGCGCGAAGTGGCGCGCGCTCACACAC----	20241	20251	20261	20271	tilapia			
22396:	TG.....A.CA..CA.AC..A.A.AC.CACA.A...A.A.....					pufferfish			
12923:	.A..ACATA.A.TCA.AC.TATA.AT..CAATA.T.A.A.....TATAT					Mouse			
20278:	-----TATACGTACGCACACACTGCACGCACACACAAGTGGGGCCTGA	20280	20290	20300	20310	20320	tilapia		
22442:	-----	..AC..A.....-A...A.....CACA----				A..	pufferfish		
31060:						..	zebrafish_a		
70658:						..AG	Human		
12973:	TCTGACA.....TC..AT.T...T.A..TAT.T.....A.						Mouse		

	20330	20346	20356	20366	
20321:	AAATCTGTCAATTCT----GCCGTGTGGTCGGTCACGTGACCTCCTCCT				tilapia
22477:	-----A..C-----T				pufferfish
31062:	CG-----T.ACAT-----A.....CTGG...				zebrafish_a
67995:	-----C.T-----A.....TGG.G.-				zebrafish_b
29795:	CCAG..ATCT-----A.....TGG..TG.				horn_shark
70662:	C.GCT.....A---A.ATC.-----A.....AG.A..				Human
66361:	A---A.ATC.-----A.....AG.A..				Mouse

	20375	20385	20395	20405	20415	
20367:	CC-GTGGAGTGGATGGAGATGACTCTCCACGTCAGCCTACGTCTCCCAAT					tilapia
22519:	..-A.....G.....T.....A..					pufferfish
31103:	.AGT....C...A.....GA.T.....T.T.....AA..					zebrafish_a
68030:	.T-C....A.....GA.....TC.....AA..					zebrafish_b
29835:	..-C..CGA..T.....ACA.T.....T....T..A..					horn_shark
70703:	..-C..CTAA.....G...AGA.T.....T.....A..					Human
66397:	..-C..CTAA.....G...AGA.T.....T.....A..					Mouse

	20425	20435	20444	20451	20461	
20416:	TTCTGCTTAGCGAACCTGCTT-CAAAGAGGCAAGA---GGCACGGCGCTT					tilapia
22568:	...A..A...A.....-G---GGC.....					pufferfish
31153:	...C.C...G.TA.C.C.A...C.C.A.T.A.TGGCA.G.-.AAA.					zebrafish_a
68079:	...A...CG...G.T.....-...CCA.TGA.GCT.AAG.A..T..G					zebrafish_b
29884:	..T.A..CC...G.T.A.....-.....G-----A..ATC.					horn_shark
70752:	...A...CA..G.T.C.....-.....G-----T..AG.G					Human
66446:	...A...CA..G.T.C.....-.....G-----T..AG.G					Mouse

	20471	20478	20488	20496	20506	
20462:	CAGAGCCATGT---TCAGGGCGGTTATAGAGGAATCG--TAGCCCAGCAT					tilapia
22614:	AA--T.....					pufferfish
31202:	G.....A.....GT.....T.GCGTATA.GTCTCAC.....AGCA					zebrafish_a
68128:	T.CTA.G...CGAGG...TA.TA.GG.T.T..T-----T...A.CA					zebrafish_b
29924:	A..GA.....T..CTGT.CG.AT.C-----AG.T.TTC.					horn_shark
70792:	G...AT.....A..CT...C..CT.C...G-----AGG.					Human
66486:	G...AT.....A..CT...C..CT.C...G-----AGG.					Mouse

			HoxA11a:1			
	20516	20526	20535	20545	20555	
20507:	AGAGTTGTAGAATTGGGTGAA-TACGATGATGGATTTTGACGAAAGGGTC					tilapia
22659:	C...C.....T.CA...C.G.T.....					pufferfish
31249:	...-----C.AC.C.GG-...A.....T					zebrafish_a
68172:	..T-----GTT.....T..GC....A					zebrafish_b
29961:	T.C.C.AGG.G.CCCCAA.C.-AG.....T..GC....T					horn_shark
70833:	..C-----C.A..A.....T..GC.T.GT					Human
66527:	..C-----C.A.....T..GC.T.GT					Mouse

	HoxA11a:1					
	20565	20575	20585	20595	20605	
20556:	CCCGTCGGATCGAACATGTATCTGCCAGCTGCACGTATTATGTGTCGGC					tilapia
22709:	T.....T.....T.....C..C....					pufferfish
31291:	T...T..C..C.....A.....C..TC...					zebrafish_a
68202:	T..G..C.....T...G...T...C.....T.-					zebrafish_b
30010:	T.TTGT..C..T..TC.T...T...T...C.....C....					horn_shark
70863:	...TG.TCC..T.....T...A..T..T..T..C..C..C....					Human
66557:	...TG.TCC..T.....T...A..T..T..T..C..C..C....					Mouse

HoxA11a:1

	20615	20625	20635	20645	20655	
20606:	GGGGGCTGATTTCTCCGGTCTTCCATCGTTTTTGTCCCAGACCCCGTCCA					tilapia
22759:	C.....C.....					pufferfish
31340:	--..T...ACGT.G..C..T...C.A....A.G....T.					zebrafish_a
68251:	--..AA.G..C..T...A.C....TC.T...C..C.....TT					zebrafish_b
30059:	--..TC.G.....A.C..G..T..T....AC....A..A..G.TT					horn_shark
70912:	--..TC.A.....A.C..C..T..T...C..C.....TT					Human
66606:	--..TC.A.....A.C..C..T..T....C.....TT					Mouse

HoxA11a:1

	20665	20675	20682	20692	20702	
20656:	CCCGCCCCATGACATACTCCTACTCC---TCTAACCTGCCGCAGGTTCAA					tilapia
22794:	.T....A....T..T..A..T....C....					pufferfish
31388:	.T....AG.C..T....T...G.T---.C.....T....A..G					zebrafish_a
68299:	.TT.....A....ACG..C.GTT...A..A....G					zebrafish_b
30107:	.T.....T....G---.C..TA.C..C.....					horn_shark
70960:	.G....A.....C.....C....C...					Human
66654:	.G....A.....C.....C....C...					Mouse

HoxA11a:1

	20712	20722	20732	20742	20752	
20703:	CCCGTCAGAGAAGTGACATTCAAGGACTATGCAGCCATTGATGCATCCGG					tilapia
22841:	..G..T....G..T..G.....C..G....C..G....					pufferfish
31435:	.AT....G..G..T....C.....T....CC.G...AC					zebrafish_a
68349:	AG...A....G..AT.T.....T....CA.G...A.					zebrafish_b
30154:	..T..GC.....T..C....A.....C...C.T...AA					horn_shark
71007:	GC.C.....C....A..G..C---GC.CG..AC					Human
66701:	GC.C.....C....A..G..C---GC.CG..AC					Mouse

HoxA11a:1

	20762	20772	20782	20792	20802	
20753:	TAAATGGCCGCACCGGGGGAACCTGCCTCAGTGCTACCCAGCGCGGAGG					tilapia
22891:	...G.....C.....A.A....A....					pufferfish
31482:	C.....T.....TCCAC..G.A..T..T...GT....					zebrafish_a
68396:	...G...ACTC.A.....TC...A..C....G---GA.C..A.					zebrafish_b
30201:	...G...AT...A....C..TC.A..C..T....TT---A....					horn_shark
71054:	AC.C...C..C..TC..G.C..C.....T....					Human
66748:	AC.C...C..C..TC..G.C..C.....T....					Mouse

HoxA11a:1

	20812	20822	20832	20842	20852	
20803:	ACATGGTACACCGGGACTGCCTGTCAGCTCAATCCGCCGTCGTAGGGGAC					tilapia
22941:	...G.....T.....A...A.T....G....					pufferfish
31529:	.TTCA..C...A....G..TT.AC....G---TAA.GACT..T..A..A					zebrafish_a
68443:	G...A....G.....CAA....A.GGACTT.G..A...					zebrafish_b
30248:	.GC..A.G...A.A..A..T..C.T..CA-----G.AC.A.G..C..G					horn_shark
71101:	.GC.C..G...A.A.....CAG..G.-----AG..CG.CC.G.					Human
66795:	.GC.C..G...A.A....T..CAG..G.-----AG..CG.CC.G.					Mouse

HoxA11a:1

	20862	20871	20881	20891	20901		
20853:	ATGTT	CGGTAAA	GCAGCC	CAGCCG	CGCTGCC	GCATACCACCACC	tilapia
22991:	.....	-A.....	T.....	A..C.....	C.....	T.---	pufferfish
31576:	.....	CC...G.-	AT.AT-----	AT.T..G..	TT.T..TT		zebrafish_a
68490:	...C.	ATCG...-	AT.A-----	T.G.TTCTC	.....	T---	zebrafish_b
30292:	.....	AATG....	-AT.....	.....	GAG..TT	.....	horn_shark
71145:	G..CCT..	CG.CGT..	T.G...AG...	T-.G..CAA..	TC.....		Human
66839:	G..CCT..	CG.CGT..	T.G...AG...	T-.G..CAA..	TC.....		Mouse

HoxA11a:1

	20911	20921	20931	20941	20951		
20902:	ACCACC	ATCACC	ACCACG	CAGCGT	GGCTCC	GCTGCCACCAATTTCTAT	tilapia
23038:	-...T..	C.....	T...A.C.....	GA.....	C.....		pufferfish
31613:	-..T..	ATCG.A...	G..ATCT...T-----	.....	T..C		zebrafish_a
68524:	-...A.	TCG.G.CA...	T-----	.....	CG.G..C		zebrafish_b
30326:	-...G.	TC..ATG.GT	TT-----	.....	GC.....	C	horn_shark
71194:	-.....	CC.G.AGT.T..	T-----	.....			Human
66888:	-.....	CC.G..GT.T..	T-----	.....			Mouse

HoxA11a:1

	20961	20971	20981	20991	21001		
20952:	GGGAAT	GTGGGC	CAGAAAT	GGCGTG	CGTCCG	CAAGCTTTTGACCAGTTTTA	tilapia
23087:	..T..C	.....	C.....	.....	.....		pufferfish
31648:	..C..C	..T..A....	C..T....	T..T....	A.....	T	zebrafish_a
68553:	..C.GC	G..G..	C..A....	T..T....	C.....	T	zebrafish_b
30355:	AACCCG	T..G..	C..T..C.....	GA.....	T.....	T	horn_shark
71223:	A.C.CC	G..C....	C.....	A..G.....	C.....	T	Human
66917:	A.C.CG	G..C....	T.....	A..G.....	C.....	T	Mouse

HoxA11a:1

	21011	21021	21031	21041	21051		
21002:	CGAGAC	GGCGTAC	GGGAAC	GCCTCG	GAGACTC	CCTCCGCGAATGGCTACT	tilapia
23137:	...T...	.....	A.....	.....	G..AA.A.....	T..	pufferfish
31698:	T..C..	C..C....	AGG.---	.....	C..TGTA	GTAGTA.AC..C.A...TG	zebrafish_a
68603:	.....	A..A.....	---GT..	A.ATCAGC	GA.---	AGC.TC	zebrafish_b
30405:	.....	T..C....	TTC.---	AGT...ATCAAC	AGT.---	G.AG...	horn_shark
71273:	.....	A..C....	C.C.---	C...A.A	CT.G..T	CTCC.A...C	Human
66967:	.....	T.....	C.C.---	C...A.A	CT.G.TT	CTCC.A...C	Mouse

HoxA11a:1

	21058	21067	21075			
21052:	CAG---	GGGACAAA	-----	CGGCGACCA--AGC	tilapia	
23187:	.G.---	T.....	-----	CC.A..A.---	pufferfish	
31745:	...CAA...	T.....	-----	TGCACTC---	A..A.A..GTC.A	zebrafish_a
68647:	.G.---	T....G.G-	-----	AA.C.G.---	G	zebrafish_b
30449:	GC.---	G..G-	-----	GCC.AGAT.---	AG	horn_shark
71320:	.C.---	G.GCGCC	GAGAAGGGGCCCC	---	G....C.G	Human
67014:	.C.---	G.ACGCC	GAGAAGGGGCCCCAAG	A..AG.TG--	C.A	Mouse

HoxA11a:1

21085 21095 21105

21076:	CTCCCGGCTCCGCGCAGGAGGAAGCGCCATCGTGC-----	tilapia
23211:	AG...A...T...CA...C...A.AGG.....	pufferfish
31781:	.A..A.CGC...A.C.....	zebrafish_a
68671:	.G..TCCAC...AG.ATC..GCAGCGACAGT..T-----	zebrafish_b
30473:	TG..GTC.G.G..AACTTCAAGTT..GAGA.T.CG-----	horn_shark
71362:	.GA..TC.G.G...GC..C..CG..TG..A..G..GCGCCGGCAACTTCA	Human
67059:	.CT...CTG.G...GT..C..CG...G.CA..G..GCGCCGGCAACTTCA	Mouse

HoxA11a:1

21117

21111:	---CCGGACAGC-----	tilapia
23246:	---AG...T.CT-----	pufferfish
31801:	---A.C.GCC-----	zebrafish_a
68706:	---G..GA.CA-----	zebrafish_b
30508:	---AG..TGTC-----	horn_shark
71412:	AGTT.....GGCGGCGGCGGCGGCTGCCGGGAGACGGCGGCGGCAGC	Human
67109:	AGTT.....G..GGCGGTGGCGGCGGCTGTCAGGAGGCGGCGGCG-----	Mouse

HoxA11a:1

21128 21139 21149 21159

21120:	-GAGGCGAAGGAGCAGCGG-----GATGAAACGAGCAGCCCGGAGT	tilapia
23255:	..A..A.....C.....G..GT...T.....	pufferfish
31810:	..A.GA.....GA.C.....G..C..T.....C..A..	zebrafish_a
68715:	..T.A..CC...G.T.T-----A..G..A.....C	zebrafish_b
30517:	..T..A...A...AC.A.T-----CCC.GG.GC.....	horn_shark
71462:	A...A...A...G...CGGCGCCCC..GAGC.GC.....C...	Human
67154:	A.....GA..CGGCGACCC..GAGC.GC.....C...	Mouse

HoxA11a:1

21169 21179 21189 21196 21206

21160:	TGTCTTCCGGCAACAATGAGGAGAAAACCGGCGGC---AGCAGTACGTAT	tilapia
23295:	.A.....T...C.....T..A..A....C.....	pufferfish
31847:	CA.....A.....A.....TA...TGCG.A...A...	zebrafish_a
68755:	CA.....C..A..T...TT.A...AGC.....	zebrafish_b
30557:	CT.....A...GG.A..AA.---TC...G...	horn_shark
71512:	C.....C...C...C..GG.....TC.....	Human
67203:	C.....C..C.....C..GG...T...TC.G..G...	Mouse

HoxA11a:1

21216 21223 21232 21241

21207:	TAAAGTCAGCGCCTCG---GTTAT-AAGAGAAAG-TTTGCAATCTTGC--	tilapia
23342:	A.G.T---C.....	pufferfish
31896:	CG.GC...A.AAGA.T---C..-GC....G.....G.....	zebrafish_a
68804:	...AA.....G.-GTA.....CTG..G.AA---	zebrafish_b
30603:	--G.....T...CA---C..G.-G.....T.....G.....C---	horn_shark
71558:	G.....CT.CGCT...G..AG.GG...G.A...A..GC	Human
67249:	G.....CA.CGCT...G..AG.GG...G.G...A..GC	Mouse

	21258	21268	21278	21288	21295	
21250:	-GCGCCGCTGTTAAAAATTTTATATGCTGTTTATAAGCATATAA---GG					tilapia
23385:	-...T.....T.....					pufferfish
31939:	-...TC.....G.....					zebrafish_a
68839:	-..T..T.T.....TG.....					zebrafish_b
30644:	-...T.....G.....GGG..					horn_shark
71607:	A..A.....-..T.....					Human
67298:	A..A.....-..T.....					Mouse

	21305	21314	21324	21334	21344	
21296:	TTTATAGAGGGC-CTGCAGACCCCCACCCCCACCCCCTCCCCACCCCC					tilapia
23431:	C.-...T...A.....C.A.A.....					pufferfish
31984:	G....A.-...-...TTT.....					zebrafish_a
68885:	T...T.T.TTTA.....T					zebrafish_b
30693:	G..T...-..T...TTT.....					horn_shark
71653:	GA.....-..TT..GTTT.....					Human
67344:	GA.....-..TT..GTTT.....					Mouse

	21354	21366	21375	21385	
21345:	AACAAAACTT----TGT---TATAA-ACTGCAGGA-TCACGTGTTTGGAG				tilapia
23469:	.G.....A...A				pufferfish
32009:	C.AGAC.AC---.T...C....TGAA.T...A...C....A				zebrafish_a
68913:	GT...-.....C.C.A.A				zebrafish_b
30718:	T.TTA.....-TGA..T...-...CA.CT				horn_shark
71680:	AG..G.....GCGA.T.				Human
67371:	AG.AG.....GCGA.T.				Mouse

	21395	21405	21423	21433	
21386:	TTGAAATTGGCCGTGAAAGACACCAAGGA--GGATATTTTCTGTAAAAC				tilapia
8180:	GC.....A..ACG--.A..TCC...TCAA..GT.				striped_bass
23510:	A..A.....-CAGCT...CC..C.GC.T.				pufferfish
32056:	A..A.....AGACTT..A..TT...C.....ACC.----				zebrafish_a
68953:	T..T.....-CC....CC..T.G.GT.				zebrafish_b
30762:	C.....				horn_shark
71721:	C.....T..				Human
67412:	C.....T..				Mouse

	21443	21453	21460	21470	21480	
21434:	TCCCTGATGTTTACCAATATATAACA---TATGCATATGTACCCAGTAAT					tilapia
8217:	C..C.					striped_bass
23555:	---G...C.....-T.GA.AG...GCGT...AA.....					pufferfish
32101:	-----TT..A.CGC.-----T.....					zebrafish_a
68994:	-----TTC.A.AG.....C-----G---					zebrafish_b

	21490	21500	21510	21520	21530	
21481:	ACCCAGCAATGAGTTGCTATACAGACCCGCGTTGATTATATCCACTTATT					tilapia
23593:	-..TCA..G.....-T..GA.....-T.GTGG...					pufferfish
32116:	-A.G...GG-----ATT.G-----T..TG---					zebrafish_a
69016:	-.TTTATT.CA-----TT.G.GC.....TTGTGC...					zebrafish_b

	21540	21550	21560	21570	
21531:	ATGACCGTGCTTTGTTTCACGGGTTCTTAGCGTTAAAAAGAGCCCTTGC--				tilapia
23621:	CGA.ATA...G.....C.....A...T...G...GT...T--				pufferfish
32137:	T...TTACA---G.A..AT.C.T..C.T..CTGC...TTTAA..TGA				zebrafish_a
69046:	T...-----G.T.-----T.A..T...C.T.G-CTATGC..T--				zebrafish_b

	21587	21597	21607	21617	21627	
21579:	-ATGTAATGAGGGTGGTGCCTCTGGTTTAAAGGTTTAGCACACACGAGCTC					tilapia
23668:	-T..C.TG.....C.GC..C..C.....G....					pufferfish
32183:	G..T..T-----AA.AA.AA.AA..AC.AC....T-----					zebrafish_a
69080:	-CCTC.T-----AT.....C.A-----..GG.....					zebrafish_b

	21646	21656	21666	21676	
21628:	TTATGTTAA-AGCTATCATGGAGCTGCTGTTCCCACTTGTACGTTTCCCC				tilapia
23717:	.GG...C..-.....CA...TCTTCAG-----..CC.ATC.GTAAA				pufferfish
32214:	.AG.AA...T...A..A..A.TAT.A..TG-----..AA.A.CC.AAGT				zebrafish_a
69109:	..G.AC.C-..GG.ATT.AA..T-----..TTA....GT				zebrafish_b

	21686	21692	21702	21712	21722	
21677:	TTTATTTGCTCT----GTAAAAAAACAAAAAAACAAACCAAAAAAGCTTC					tilapia
23760:	..A..G..A.....G....T.TTTT.C.....C.G					pufferfish
32259:	AA...G.AA.A.ATTA.....GC.T..T.TTTG.TT-----C.T					zebrafish_a
69147:	.C.T...AAAA-----..C...T----.T...TTGT.TT.CT-----T					zebrafish_b
18299:	.G.C..T.G-----..A.....T.C...					Mouse

	21731	21741	21751	21761	
21723:	A-----ATGTTTTACGTAAAACTCAATGCAGCAGAGTCTAATT				tilapia
23795:	.-TACTCATGTCTCA.G....AC.CGCGCGCGC...-----G.AC.CA				pufferfish
32302:	.CCATTAATTTGT.A.....T.....TA....				zebrafish_a
69186:	-----TCA....TGG..G...AGA...AT..A----CGA....				zebrafish_b

	21771	21775	21783	21793	
21762:	TACCTGCGTCTAC-----CACAGGC--TTCTACTTTAAA				tilapia
23839:	C..ACA.ACAC..ACACACA-CACACACA...CA.--ACAC...CGC.G				pufferfish
32335:	-----C-----..T..G.....				zebrafish_a
69221:	.CTG.ATCCT..T-TACTCAGCAAACGAG..TG.A.CGA.T.GT...T..				zebrafish_b

	21803	21813	21832	21842	
21794:	GTGAACTTGTTGTTTTCACTTGCTAGTAA-AGGTCAAAGCCCAAGTGTAT				tilapia
23886:	A-----..ACA.C.G..TA.ACAGCT.....A.A..A				pufferfish
32348:	-----TA.AG..C...TTT..A..AC.T-----ACA.G.				zebrafish_a
69270:	A.A.-..C.A.CC..CTTT.AAA..A...T.AT.T..T.A.TG.A...G.				zebrafish_b

	21852	21862	21872	
21843:	TGTCTAGCGAGCCAGCAGCGAATGGCTTGGTAA-----			tilapia
23917:	--..AA..TTGTA..ATGA.....			pufferfish
32378:	-----..T.T.T.T..AT-----			zebrafish_a
69319:	---TAG..T.T...TA.AT.-.CA.T..AT.T.TTACAGTCACATTTCTA			zebrafish_b

	21881	21891	21900	21910	
21876:	-----TCTTTCCAGTGTAATA-TAATATCAGTATATATGAC				tilapia
23935:	-----..T.T...A...TT.G..G..T.A.A..TCTT-				pufferfish
32391:	-----..T.T...GG.GTGGC.G.TT..GCG.G..T-				zebrafish_a
69365:	TTAGGGCAGCAGTT.T...TTTT.T.TT.TT.TT..GG...ACT-				zebrafish_b

	21920	21930	21942	21952	
21911:	ACTTGAAAGGCTGAAATGGGAAATATGT-----TATTAAATGCTTCAT				tilapia
23970:	-----CA.A...CG.C-----AT...A..T..				pufferfish
32423:	-----AT.C.T...A---GTATA...AT-----				zebrafish_a
69414:	-.....AA-----..C..T.GAATTAGG.G.AT-----				zebrafish_b

	21962	21979	21989	21999	
21953:	GTTTCAGGAAATCCTCTC---ATGCGTAATCTGGGCGACATCCCACCCGT				tilapia
23994:	.C-.GAA...C.T....-C..CAAC-----CG				pufferfish
32447:	---ATAT.T..ATATAT---.ATA-----				zebrafish_a
69449:	---TCA.TTG..TC.G.TGC....ACT-----				zebrafish_b

	22009	22017	22027	22037	22047	
22000:	TAAATCTCTT-TCTGTA-AAATAGTCACGGCTAATTTGAAGTGT					tilapia
24020:	.C.G.TGA..G.T....-C.C..A..T.....TG.CAT--.TGC					pufferfish
32470:	.T..A.A.A-.A.A..T.T..TAT.TATA..TA.AT.TA.A--.TG.					zebrafish_a
69475:	A.GGCT.A...-.....G-....TA----.A....A.CAGG..A--A..G.					zebrafish_b

	22057	22075	22084	
22048:	TTTCTGTGACGCCTGTAT-----TTCTTCTTCTCCCTCTT-CT			tilapia
24067:	...T.C...T			pufferfish
30111:				pufferfish
32517:	A.AT....TA....A...GTACACTATTAG..TA.A.AT.TGA...A-AC			zebrafish_a
69517:	...TG-----ACAA.T..TCTT..T.---			zebrafish_b
68625:	..GC.C....A.....TGC			Mouse

	HoxA11a:2					
	22094	22104	22114	22124	22134	
22085:	ATTTTGTGGCTTTTCAGGTGGACAGAGGACCCGGAAGAAAAGGTGCCCTTA					tilapia
24098:	...C....G.....A..					pufferfish
30123:	CA.A.....A..C....AG.....					pufferfish
32566:	G.G.AT.TA.A..T....G.CC...TTT..T....G.....T..C..					zebrafish_a
69539:	-----...T..A.....A.A..A.....A.....					zebrafish_b
31786:	..A.....C..AC.T..A..C..A..GC...T..C..					horn_shark
72955:	C..AC.C.....C..A..GC.C.....C..					Human
68644:	C.C.CTCCTTCC.T....C..AC.C.....C..A..GC.C.....					Mouse

	HoxA11a:2					
	22144	22154	22164	22174	22184	
22135:	TTCCAAATATCAAATCAGAGAACTTGAAAGAGAATTCTTTTTCAGTGTGT					tilapia
24118:	G...C.....G.....T.....					pufferfish
32616:	CA.T....T.....TC.G..G.....G.....C.....C.....					zebrafish_a
69580:	CA.G.....G..T.....G..G..G.....T..C.....T..					zebrafish_b
31826:	CA...G..C..G..A..G.....G..G.....T.....C.....					horn_shark
72992:	.A...G..C..G..C...G..G..C.G..G.....C.....C..C..					Human
68694:	.A.....C..G..C...G..G..GC...G.....C.....C..C..					Mouse

	HoxA11a:2					
	22194	22204	22214	22224	22234	
22185:	ACATAACAAGGAGAAGCGGCTGCAACTGTCTCGGATGCTCAACCTGACC					tilapia
24168:	C....A....A..CA.....A.....C.....					pufferfish
32666:	C....A..A..A..A..T..G..C..A.....T.....C..T					zebrafish_a
69630:	C....A..A..AA...A..G..T..CA.A.....C..T					zebrafish_b
31876:	.T..C....A.....T..C.....T.A...					horn_shark
73042:	T....A.....C.....C..C.....C..T					Human
68744:	C....A.....T.....C..C.....C...					Mouse

HoxA11a:2

	22244	22254	22264	22274	22284	
22235:	GACCGACAAGTAAAGATCTGGTTTCAGAACCGTCGCATGAAGGAGAAGAA					tilapia
24218:	G.....A.....					pufferfish
32716:	..T..C.....G..A..T.....C.....G.....A..A..					zebrafish_a
69680:	T..G..C..A..A.....A..A..AA..G.....A..A..A..					zebrafish_b
31926:	..T..G.....T..A.....A..GA..G.....A.....					horn_shark
73092:	..T..T.....C..A.....A..GA..A.....A..A..					Human
68794:	T.....C..A.....A..AA..A.....A..A..					Mouse

HoxA11a:2

	22294	22304	22314	22324	22334	
22285:	ACTGAACAGAGACAGATTACAATATTATACGTCCAATCCTCTGCTTTAGG					tilapia
24268:	GT.....G.....C..A.....C.....T.....					pufferfish
32766:	...A..TC..G.....G.....C..GTA.....A.....A...					zebrafish_a
69730:	.T....T.....C.TC..G..G.....CA..G..C...T.....					zebrafish_b
31976:	GT..A.....G...C..CC..T.....C..TA..G.....AT...C..GA..					horn_shark
73142:	.A..T.....C..T.....G..C..CT..AG..A.....A..C..C..A..					Human
68844:	GA..T.....C..G.....G..C..CT..AG..T.....A..T..C..A..					Mouse

	22344	22354	22363	22373	22383	
22335:	GGGGCCGGGGAGAAGACGGCCACAGCT-CCATTAGTCCTCTGCTTGTGGG					tilapia
24318:	..TAAAAA.C..C..CTGT..TGTC...G.....-A.C...					pufferfish
68894:	.					Mouse

	22393	22403	22413	22423	22433	
22384:	ACTGGTTACGTTTACAGACTGACTGACTCGCCTGGCTGTGACTCTCCCTG					tilapia
24363:	..C.ACAGT.....-T....					pufferfish

	22441	22451	22461	22471	22481	
22434:	--TGTACATTGTGTACCACATTGGCCGCCGCAGCAGCAGCACTGCTCGAT					tilapia
24389:	GT.....T.....T.....GA..G..G.....G..G..					pufferfish
69811:	...					zebrafish_b

	22491	22501	22511	22521	22531	
22482:	GGTTAATTTCAAGTTCGAGGACAACAGTATCTTGTGATCTGAAATACTCA					tilapia
24429:	CGA.....-CC..T....T..TTC..					pufferfish
69814:	T....					zebrafish_b

	22541	22551	22561	22571	22581	
22532:	AACAAAGAGGGAGTACGAACAGTGGCGGTCCGTGGACTTTGATTTGCTC					tilapia
24470:	..A...A.AAA.AA.AA.G..-..AAATAAT...G..A..AG...T.-.T					pufferfish

	22591	22601	22611	22614	22624	
22582:	CTCATTGTCTCACTTTTGAATAATGTAGATT-----TTTGGACATCGC					tilapia
24518:	T...GG.C..GTT...C..G.GG.A.A.G.CAATTGGA....T.C.T..					pufferfish

	22634	22644	22650	22660	22670	
22625:	CAAGACTGTGTGTTTGCGAAGGCC----TTGTTTCATAATGTGACCTAAGA					tilapia
24568:	.C.....AAC..A.G....TCAA..A.G.T.G..A.CC...TT					pufferfish

	22680	22690	22700	22710	22720	
22671:	CGCTTCATTTTCTTTTCGCGCGAGAAAAAAGAAAAAGAAAAAGAAGT					tilapia
9733:		..A.A.....A....A.....				striped_bass
24470:			A....A..GC.T...A.			pufferfish
11377:			.A.....A....A.....AC.A.			zebrafish_a
27475:		.A.A.A.....A....A.....A.				zebrafish_b
19531:			..G...G.....GA.....AG			Mouse

	22729	22739	22749	22759	22767	
22721:	AATGAATT-GACTCATCGAGTGTATTTTGTAAATCAAAGATCTGATT--T					tilapia
24497:	....					pufferfish
24631:	...CA....GGCTC.A.....T.AT..GAC					pufferfish
11406:	G....GG.-.T.-----A..GTC....C...T....					zebrafish_a
19558:	..A...					Mouse

	22777	22787	22797	22807	22817	
22768:	TTTTCTCCTGTTTTTAAATCAGAAAACCTTGTGGATTTAGGCTGATGGTG					tilapia
24677:	C...A.TT.-...CA.....G....CG.G....A...AAG.AGAA.C.					pufferfish

	22822	22832	22842	22852	22862	
22818:	AAT-----ATCTTGCCAACCGAATCTATAATTGGTGTGACCAAATAATGAA					tilapia
24726:	G..AGGTG.CT...A...TTA.....CT					pufferfish

	22871	22881	22891	22901	22911	
22863:	TCCG-ACGGATGAGAATGATGTGGGTTTTTCTTGTTTTGTGTGCTTATT					tilapia
24776:	A.T....A.....TATCAC..C....T..TC...T.....					pufferfish

	22921	22931	22941	22951	22960	
22912:	TATTTTCGTAGCCTCTCGTTTACCATCTTACTTTAATGTCACGGC-TATCC					tilapia
24826:	GT.....A....C.AT....---.C.G.....A.T.T.T.					pufferfish

	22970	22980	22988	22998	23008	
22961:	AAGTTAAATCTGTTAATACGCGCA--GACTACTGGGATCACATGTTGTA					tilapia
24873:	C.A.C.GTG....AA.TCG.AGT..GG..T..T..C.T...A.-----					pufferfish

	23018	23027	23041	23051	
23009:	GTCTGAGCTGACCTCAAA-ACGAG-----CTTTTGTCTGATTTTCTGTG				tilapia
24916:	--...C.G.....TG....ATTTGTT.....T.TCC..TCT..				pufferfish

	23061	23071	23086	23096	
23052:	CCCTGCAAACCAAGGATTAGCAGGCTA-----ATTTTGTATTTTGCCTGT				tilapia
24964:	.TTA..G.--G...GC.GT--.A...TTTAT.....A.--.A.				pufferfish

	23106	23116	23126	23136	
23097:	CTTTCAATTTCCAAATCAATTCTAAGGTGTCTCTTTTGAATT-----				tilapia
25008:	T...CAAGG....C..CT.G-----T....CA..G.TTGATGAC				pufferfish

	23148	23158	23167	23177	
23139:	TATCAATCCAGTATTAATAAT-----CCAGTCCGATGGGTCCGT				tilapia
25052:	..A.CGC.G..A...G.C...GCGGGACAAAG....GA...AA.---A.				pufferfish

23187	23197	23207	23217	23227	
23178:	GTGGATTTG	CACTGAGGTAC	ACGCCCGAGAT	GTTCACAACAGGTAACCT	tilapia
25099:	A..CTGC.....C.....C.....-...A.CG.A.C...-.....--.A	pufferfish			
23237	23247	23257	23267	23277	
23228:	TACGCGGTGGG	CCCCCTTCGTTT	TAAACAAGACTTT	CAGTTCACGATTCTT	tilapia
25145:	C....CT.C..T.A.A.AT.GA....T.-----..TTTC..GT..C...C	pufferfish			
23287	23297	23307	23317	23327	
23278:	GAATCTTGGT	AATTGTCGTTT	AAATAAAACAGAAAAAAG	AAGAGAAAAA	tilapia
13115:			G..AC.....AG.AGC.....		striped_bass
25190:	---.T.GC...T...C-----				pufferfish
29902:				.....	Human
19564:		AG...G...GA..G.....AG.A.....G.			Mouse
23337	23347	23357	23361		
23328:	GAAAGATGAAGATTA	AAAAAGATTAATTTTC	-----AAAT		tilapia
13145:	C.CT.GAA.C.....				striped_bass
25203:	-----G..GT.....TT....TCTTTTTTTT	AAGAAG.C..			pufferfish
29907:	A...AT.T..A.....A.G....				Human
19595:	A.G.AGGA....AAG..				Mouse
23365	23375	23384	23394	23404	
23362:	GT-----ACCGTCAGGGCGAGG-CTGGCCAGGATGATC	CACTGAATTT			tilapia
25242:	..CCTGTC.TT.....G...AT.A..TTC..T.C...G..T.....	pufferfish			
23414	23424	23434	23444	23454	
23405:	AACTGCTTGGTCTG	CCCGAAATATTGTGTATCATATTAT	ATTTCCAAATA		tilapia
25292:	-----..C...A..G..A..C.....G.....				pufferfish
12440:		AA.A..AT...A....A.ATA.....			zebrafish_a
23463	23473	23486	23496		
23455:	ATAAA-AAGT	GGAATAATTACCG-----AAAATCAACTT	GACTTGTAT		tilapia
25332:	.A...G..AAAA..G..AA....TATTTAA.G..A...--.CG.C...T.				pufferfish
12471:	...T.-.TA.AA.....				zebrafish_a
23506	23516	23525	23535		
23497:	TTTGTCAGTGACTTTGCTTTTTC	AA-----TTGTATATATATAT			tilapia
25380:	...-----.....T.....A..AAAAACAAACC.AA.CC.CG.C..	pufferfish			
23545	23555	23565	23575	23585	
23536:	ATGTATATATATGAA	ACTCACACTTACAGCACAATCACAATGAACTGCCT			tilapia
25421:	.AAAGAG..A.....AG....T.--TA.G...G..-----.....AT.G	pufferfish			
23600	23613	23623			
23586:	ACAGG-----TATGAAGCA	AAACAACGTA-----AACAAATGAGTTTCA			tilapia
25465:	ATCCT..GA..A..CGGTG...C.CGTTGC..A...A.A.CAA.	pufferfish			
23629	23637	23647	23657	23667	
23624:	GT----GAATT--TAAAGGCTCAAATACG	AAATATTAACCAAACAGTCGC			tilapia
25515:	.GAATA.....AGA....AA.T.G.----T.....AT.TA.....GT.G	pufferfish			

23677	23687	23697	23707	23717	
23668:	ACTCTCTACCACTACTGCAGATTAACTCCTTCTGTGTGAATGAAGCA	tilapia			
25562:	..ATCT.GT..T-----	pufferfish			
23727	23737	23747	23757	23767	
23718:	AAATCAATAAATTATTAAATAAATACCCAACAATTCAGTCTTTGCCAGCT	tilapia			
25574:	-.-.T-.-.GT-.-.C-TGC.C-.GA.TG.T-.AG-.-.G-.A-.-.	pufferfish			
23777	23787	23797	23807	23817	
23768:	GTGTGCTCAGATAGCTAACACAAATATAAAAAACAATAATAAACCTAAATC	tilapia			
25617:	..-----C.....T.....	pufferfish			
23827	23837	23847	23857		
23818:	GATACTTAAATTATGTTTGTGCTGCTGTGCTCTCCAAATATTTCT-----	tilapia			
25632:	-----G..G.....C..T..A.TG.T.TGT.G.G..A.CTATAA	pufferfish			
23871	23881	23891	23901		
23863:	-----CAGTCTCGCTTTGCTGTATTTTGAGTTATATAACATATT	tilapia			
25673:	CCACAAAGAAA..T.GCT...GC..CA.T....G-----TG.	pufferfish			
19501:	...C.....AT..T.....	horn_shark			
23911	23921	23931	23941		
23902:	TT-----GCAATTCCTTGCAATTCATCTAAAGGAAATCTTTGTTAC	tilapia			
25716:	CC-----AA..A.AC..T.GC.T..TC-----CGTC...C.G.	pufferfish			
19521:	CCTAAAAATTCA.....C....T..CG..GT.....A.T.GT...	horn_shark			
23948	23958	23968	23978	23988	
23942:	T---GAATCTGTGCAGATAGCTTATAGGTCACCTTTTATCTGTCACAGTC	tilapia			
25750:	.CCA...CAC.AA.CC...-----G...CAAA...A.T	pufferfish			
23998	24008	24018	24028	24038	
23989:	ACATTTATTGTTGCCAGCACATTGCACCATGTGTACTTTATTCTCGAATC	tilapia			
25785:	..-----...TGC.G..A.TT.G.GC.CAC.T...G.GTC.AG---	pufferfish			
24048	24058	24067	24077	24087	
24039:	TTTTCTCTCTGCTTGTGTCTGT-TCGTGTGCGCAAAGTGTATTTTGCTG	tilapia			
25823:	--.A.AA...GCAA.A..GC.G..C....T-----C...CCCAG..	pufferfish			
24097	24106	24116	24126	24136	
24088:	ATTGGCTTTGGAAACGC-TCTCCAAGTGGAGTCTCCTTTGGCGAGGGTCG	tilapia			
25866:	G.....C.....T.T.....AAC.....G.....TT...A..	pufferfish			
24146	24156	24166	24176	24186	
24137:	CCATATTTGCTGTTGTTATCGCTGTGTTTATGGGAGATAGCCGAGCGCA	tilapia			
25916:	G.....A.A.....G.C.....A.....	pufferfish			
24196	24206	24216	24226		
24187:	TTGGCGTTTCATATATGACAGTCAAAAGGGCCATAAACCCAGGGAGAGAG-	tilapia			
25966:	G.....	pufferfish			
33812:	.A.....G.G.C.-....A..A....GT...A.C..A..T	zebrafish_a			

	24245	24255	24265	24275	24281	
24236:	GCTGAAGTTT	ATG GTTGCCT	CTC GCTGCCA	TAGTCCGCC	TTGC----	CT
26015:	.....	T....	TT.....	CT.....	-----	
33860:	.....	AG.....	T...T	GC G.AG..	A.T.G..	CTGG..
71144:						

tilapia
pufferfish
zebrafish_a
zebrafish_b

	24291	24301	24310	24320	24329	
24282:	TGCGCATCCTTTACT	GCGCGCTGGAAT	-TCCGTCCCTAATT	ACGGG-	ACA	
26061:	.....	.....	.....	.....	.....	
33899:	G.....	GAG.T..	TGA....	A.....	.....	G...
71145:	.....	GAG..	T..A.....	-T.....	.....	C....
75796:		...	G.T.T..	T.-..	T.AG..	CT..A.AA.C-C..
71435:		...	G.T.T..	T.-..	T.AG..	CT..A.AA.CCC..

tilapia
pufferfish
zebrafish_a
zebrafish_b
Human
Mouse

	24339	24349	24359	24369	24379	
24330:	TCCTCCCCGTTGCCG	CAGCAACGCGGCCA	TAAAAGCTGTCT	GAGAGTCTG		
26109:	.....	T.....	C.....	.....	TC.....	
33947:	.....	TT.....	TT.....	A.....	.....	T.T--..
71192:	...C.....	-.....	T.....	T.A.T.....	C.....	T..T--..
75829:	.....	G-A.G..	T.TGA..	T.T..T.G...	C-.C...	C.G.G--.C.
71469:	.....	G-A.G..	T.TGA..	T.T..T.G...	C-.C...	CAG.G--.C.

tilapia
pufferfish
zebrafish_a
zebrafish_b
Human
Mouse

	24389	24399	24409	24419	24429	
24380:	GAGCATTTGTACAATT	GGAGTGCAGTGC	AATAAAACC	GTCTGAGACCCAAG		
26159:	.G.....	.....	.....	.....	A.....	
33995:	.....	GG.....	C..C.TG...	C.....	T.....	A.....
71239:	.....	G.....	C...AG...	C.....	.....	A.....
75875:	.CCA.....	C.T.T....	A...GCC..	T.....	.....	
71515:	.CCA.....	C.T.T....	A...GCC..	T.....	.....	

tilapia
pufferfish
zebrafish_a
zebrafish_b
Human
Mouse

	24439	24449	24459	24469	24479	
24430:	GTTATTA	ACTGTGTTACCA	AGGAGGCGACAG	CAACGACAGGCAGAGGACG		
26209:	.....	.....	AG-.T.....	AGT----	...	
34045:	.....	--.GCAC.A.T...	A.G.A.AGAGA...	A..G.TATT..	A.TT..	
71289:	.....	.....	T...AGCTA..	A.A.....	G.T..A.....	
30247:			.....	C.A..AA.A.A.	GT..	

tilapia
pufferfish
zebrafish_a
zebrafish_b
Human

	24498	24508	24518	24527	
24480:	GATAGAAA-AGCTT	CTGCTCGCTCGC	ACCGGCTTCATT	TGA-GAGG	
26254:	.C.....	G..TCC.....	CT..CA..T..	A.....	-A...
34093:	.C.TTC...	A.A.A.T.T.CT	GGAA.ATTT....	GG...T-TGT.	
71330:	-CC.TTG..-	.....	G..T..A.AGA..	TTT...C.A.....	TCTCA..
30268:	.G.G..GGG-	..AC...	C..G..G..TA..	C..AAGCC..	C.

tilapia
pufferfish
zebrafish_a
zebrafish_b
Human

	24537	24540	24550	24560	
24528:	CTTTTCCCTGTA-----	ACGTGGTTTATCCACCTCAAATCATT	CCTG-		
26303:	.....	T.CC.G-----	G.....	GA.....	GCG..TG.TGG.C
34138:	.G...A...A....	-----	TAC.TA.ATG..	G.A..T-----	TGG..GCA-
71378:	TG.CC.ATCA.GGCACCACGAA...	A..GCT...	-----	TT...G---	

tilapia
pufferfish
zebrafish_a
zebrafish_b

	24579	24588	24598	24607	24617	
24570:	AGGAAAAGGCTGCACT-	TGGGATTGGACTCT	CCT-ACCACGGGCGGCGC			
26346:	..CTG.....	CA.CACC.C.CTCTG	.T.T.....	A.....		
34177:	.T.....	....	C..A..T.G..CA.A.GG...	--T..TT...	A...A.	
71419:	-----	.....	T..-G.C.G.ACATT..	ATG.--...	T..AT.....	
35044:			....	AT..T.....		

tilapia
pufferfish
zebrafish_a
zebrafish_b
horn_shark

	24627	24637	24647	24657	24667	
24618:	TATTGGGACCAATGTCACGGCCTTGGATCTTTTGATCTCCAACTCACCT					tilapia
26396:	G.....C...CGC..T....TAA...--					pufferfish
34222:	.CG..A..T.....T.....G.....					zebrafish_a
71457:	AC..TA..T.....TT...					zebrafish_b
35058:	C...TA..T.....AA...					horn_shark

	24677	24687	24697	24705	24715	
24668:	TAAAAGCAAACAGGTAAAAGTCGACCGGGAAGCCT--GGAGCTTGAATAG					tilapia
26444:	-----TG.TGT.AAC.G..TCTG..T...CAG..G.					pufferfish

	24731	24741	24751	24761	
24716:	TTTTGC----TCTGCACTAAAACAAATAATTGTATGTTTCATCGCTTGAAT				tilapia
26485:	G....AGAACG.A....C..C.-----TG.TAT.AC.G.				pufferfish
35136:	G.GTT.C..A..A.A.....G.TT.....				horn_shark

	24771	24781	24791	24801	24811	
24762:	TCGTGCCTTGCATGCAAGCCCTGTTAGTCTGAGATAAGAGCCTCTTTTTT					tilapia
26524:	AA.A.-----G.G.-----G..A..A...AGA---...					pufferfish
35173:	C..					horn_shark

	24821	24831	24841	24851	24861	
24812:	TAGTTTAGTTTCCACATTTTTCCTCTGGTGCCCAAAGGCTTACGCGCTAG					tilapia
26552:	G.A.CC.....G-----A.T..GCT.GC.GT..A.---					pufferfish

	24871	24881	24891	24901	24911	
24862:	AGAAAGTCTTCTCTGGGGGCCCTAATAAGGCAGCACATCTGTGCCAAGGCT					tilapia
26586:	----C.....A.A.....C..					pufferfish

	24921	24931	24941	24951	24961	
24912:	TCATGCTGCATGTGCTATTTCATTTTGTCTGGGCTAGAGCTTTTAAATGGTT					tilapia
26632:	A...TAG.....C..					pufferfish

	24971	24981	24991	25001	25011	
24962:	GGAGTGTAGCATAGCCGCCCTTGTACCTGGAGAGATCTGCAACCCCTCCCA					tilapia
26682:	CA...A.....C-----C.G.....					pufferfish

	25021	25031	25041	25055	
25012:	AGTCTAACCACAAATGTTTTGTATTTCTGGGAAACTCTGC-----CTTAA				tilapia
26705:	-A...CC.....A....G.AC...G.A.A.CATTTT...CC				pufferfish

	25065	25075	25085	25092	25102	
25056:	TTATTAGACAAAGGTGGACACAGCTCGTACCTT---AATGACACAAACTA					tilapia
26754:	CA....A..-----T.ACA.T...CAA..AAG..AC..GG.					pufferfish

	25112	25122	25132	25142	25152	
25103:	GCCAGTGGGTGCTGGAAGGAAAACAAACGGTTTCATTTTTCACATACTAA					tilapia
26793:	C.-TT.....T-----					pufferfish

	25162	25172	25182	25192	25202	
25153:	TGCAGCTCATCTTAAATCACAGCAGTCACCTCTGAGATCATTCTTCTCCG					tilapia
26814:	-----T.....G.-----T.					pufferfish

25209	25219	25229	25239	25249	
25203:	---	TGCTCTT	CCTCTTAAAGGAATCCACTAAAATCATT	TGACGTCGTTCC	tilapia
26831:	GAT	.....	-----T....A..GG	----C.....	pufferfish
25259	25269		25280	25290	
25250:	AAAACACACGATTCCCTGTCTACGTGC	-----	CAAAGCTGTGATTA		tilapia
26863:	---.T..GTC...GT...--.G.....CAAGTAGGG....T..C.C....				pufferfish
25298	25308	25318	25328	25338	
25291:	AAAAGGT--	CGATTTGATTGCGATAGGGCAGCAATCGCGTCTCCTTTTCC			tilapia
26908:	TG.G...GCT.....		AT.....		pufferfish
25348	25358	25368	25378	25388	
25339:	TTCCTGTAATAGACACTAGGGCTGAGGTCTGAGGCTATTCTGTCTCAGTC				tilapia
26958:	C.C.....--G.A..C.C.C...CG.....-..A..G....CA				pufferfish
25398	25408	25418	25428	25438	
25389:	CAAGTGGCGAGTGGCTATTCTAAACCCTAATGCGTGTGGACCCAGTCTCT				tilapia
27005:	A.-----T...CGC...ACGG.....G..C----				pufferfish
75970:			...G.A..TC....		Human
20810:		...G.TT.A.AA...TGG.GT.T.			Mouse
25448	25458		25473		
25439:	CTTTTCTCTCTCTCTCTTTTGTCTCTC-----GTGAAAAA				tilapia
27047:	-----T.....C..G.....				pufferfish
37180:	...A..T...T.T.T.TGTTGCACTTTCTTTA.....				zebrafish_a
75984:	.C.C....CT.....TC.				Human
20834:	GC.CG.....C.C.....				Mouse
25483	25493	25503	25513	25523	
25474:	TAAATGCTTCCGCTTGGATGTAATAAAACGCCGCTTATTGTTTCATAACT				tilapia
27075:	-.....T....A.....A				pufferfish
37220:	-.....GC..T.TG.GA.GT.....T..				zebrafish_a
25533	25543	25553	25563	25573	
25524:	GCACTCGGGACGAACATGATACGATTCAAACGGCCTCTTCGGCCACGATT				tilapia
27124:	A.....T.....C.....A....AC....A..T...				pufferfish
25583	25593	25603	25613	25623	
25574:	ATATGGGCCTGATCAAAGCCAGTGGTCAGACTAACTGTGTTTCAGGATAT				tilapia
27174:	ATGAG.....TG.....C.G.....T.....				pufferfish
25633	25643	25653	25663	25673	
25624:	AATAGTCGGGCAGCTGTGAAAATGAAGATTTAATAGCTACAATTAATAAC				tilapia
27224:	T....C.....G.A.....				pufferfish
25692	25702	25712	25722		
25674:	TGCAACACA-ACGATATCGATAGGCCCTGTGCCACTACAACATCATGAA				tilapia
27274:	..T.G.G..C.A.....C.....A.....C.GC...				pufferfish

25732	25742	25752	25762	25772	
25723:	GTGTGCGGGCCAAAACACTTTAATACCAGGCACACATAATTAATTGAGGT	tilapia			
27324:	A.A.-----TG..T.G.....A..	pufferfish			
20399:	...TA...T.G..G.T....AT.	horn_shark			
25782	25792	25802	25811	25821	
25773:	ATTTGGTTTCCCTGTTGGCTCATGTGTCCCA-CGAGCAACAGGCCACTGT	tilapia			
27358:	A.....CAC...G...C..T....CTT..AAT.A.....G....	pufferfish			
20423:	...G.....TA.....	horn_shark			
25831	25841	25851	25861	25871	
25822:	GGGGAAAAGCGCACATGATTTTAAACCTATTGTTGTTCTGTTTATCTGTGT	tilapia			
27408:	GGG.TCTG.T.TGG.....A.....T...	pufferfish			
25881	25891	25901	25911	25921	
25872:	CACTGGGCTAACACTGTTGTTGTTTCATTTTATGTTTTGGGGGGGAATTTT	tilapia			
27446:	..-----A....C.GA..G.T.A.----.A...	pufferfish			
25931	25941	25951	25961	25971	
25922:	ACGAACGGCCGCTCACGGCCTTTATTCTGAAATCTCAAAACGCCTTTTAA	tilapia			
27474:	..-..TA.TT..GT.---AT..C...TGCCT...A...-----G.	pufferfish			
25981	25991	26001	26016		
25972:	AAAAATACAGTTCCATAATAGATCATTTTCTTCTCA-----AATTGGCCA	tilapia			
27510:	..G.GA..GA..-----T.....TC.AC.GTAAGC.T..TATG.	pufferfish			
26026	26036	26042	26052	26062	
26017:	TTGCATTATATTCTCATTCGCAT----AAATAACCCGCATCCAGCCTCAG	tilapia			
27554:	..AG.CA...A.T.GC..TAA..TTAA.....-----T..T.	pufferfish			
26072	26082	26101	26111		
26063:	TCATTTAAGTAATTTGAAGTATGCGCGCA-CTGAGCAGCAGCGATTGACA	tilapia			
27594:	..G.G.GC.CC.C.G...A.---.T.T.TT.TTA..CG..A.GAGTCT.	pufferfish			
26121	26130	26140	26150	26160	
26112:	AACGTCCGCCGT-GACTCGGTAAACTCCAAGTCAGTGTACATACAAATG	tilapia			
27641:	..T...T...C.CA..GT.C.....T.----A.....CACG.TG.G.A	pufferfish			
26169	26179	26189	26199	26209	
26161:	ACAGAAA-ACCTAAATGGGCTCAATTTATGAATAACTCCCGAATTTCTCTC	tilapia			
27687:	TTTT...T.TT....C..C..G..CAA...-----T.TT.C..TGA	pufferfish			
77720:	...GC..TGA	Human			
21409:	.G...T...	Mouse			
26219	26229	26235	26245	26255	
26210:	TTTTTTTTTTTTTTTTTGCAAAAC----AAACTGGGGGGGTGTTATAGAG	tilapia			
27728:	A.C..CC.CA...CAA.A...G.TACAA.C..CC...A..CA----.AT.	pufferfish			
77730:	C.....T...	Human			
21418:	C.....C..A.C....C..	Mouse			

26265	26275	26285	26295	26305	
26256:	GCCACCTGGG	CCTGGTAATGGCAAAGCTGCCCAAGATTA	AACTTCAACCTG		tilapia
27774:	A.....A.....	GATG.....C.A.....T..			pufferfish
26315	26325	26335	26345	26355	
26306:	GAGAGAGAGCAATGGAGTGCACATGGCCAAGGACAGGACAAGATGGAAGG				tilapia
27824:	--.....A..C.....	CT.AG.A...A.C..			pufferfish
33836:		..C..A.C....GG..G...			Human
26365	26375	26385		26401	
26356:	AGAGGTTTATTGTGGACCTTATTGCCCCAAATTGGACAG----	GATGGCT			tilapia
27872:	T.....A...C.T.....A.....	CAAACCT.....			pufferfish
33856:	GA.AAC..TG.....A.AC.....				Human
26411	26421	26431	26441	26451	
26402:	TGTGTATGTGGAAGCTTTATGTTCGGCTTTACTGTGGCGCAAAGGGACCTT				tilapia
27922:	...A.G....AG.TT..GC..GG.T..CC.-----	..T..			pufferfish
26460	26468	26475			
26452:	TCCCTCAC-----AACAAA--GTGATCAAT---ATTT-----				tilapia
27957:	C..A....CATCTAAATTAG..C..TT..AT....TAG....TAATTGT				pufferfish
26483		26495		26514	
26479:	-----TGGCAGATTAACAA-----ATATAAATTTGC-GTAATGAAGT				tilapia
28007:	AACAA...T.TT.C.....AAAACGAG.A.CG.C.C..AG..G.AA.T..				pufferfish
26524		26541		26551	
26515:	CTGCCTTGAGTTTTTTTT-----TTTTAAATGTTTGTAGGAAA				tilapia
28057:	G....--A..C...A..GCGAAAAACACG.....C.....				pufferfish
26561	26571	26581	26591	26601	
26552:	GGAATCCAAACAGCGCAGTGCTGTATGGTGATATCATTTGTTGTGTTTGA				tilapia
28098:	-.TT.....T.G.A.---.A.A.C.-----G...AC...A.-AA.AA.				pufferfish
26611	26621	26631	26641	26651	
26602:	ACAAAAGCACACGCAGGCTTGACCTTTTTTATCTGTTGCGCGTAATGATT				tilapia
28139:	CGCA..G.AA.A.AA..GA.ACAA.....				pufferfish
26661		26678	26688	26698	
26652:	ACTTGAATACAATTAAT---ACATTCTATATTTTACGTTTGTGGAGAAA				tilapia
28172:	----A....GG.A...G.TAA..C.GA.GC.....				pufferfish
26708	26718	26728	26738	26748	
26699:	AACAAACAAATAGCATAATTATTGCGTTCTCTAATTTGAAATGGATAGAT				tilapia
28206:	-----C...T.T..T.T....GCA....AAT..TG.				pufferfish
38020:		..T.C.A.C			zebrafish_a
26758	26764	26774	26784		
26749:	TGAAAAAATGTGTT---CATGGTTTTAGTGTAACCTCT-----				tilapia
28237:	CAG.CG.G.T.A.T.CTCTT...CA.G.ATA.C.TG..CA.-----				pufferfish
38029:	.A.....T.C---G..CAA...T....G..T.A.CTATATTTGT				zebrafish_a

26785:	---	GAAAT	--	TTTATGCACACAGGTTTTATATAAAATTAAGAAAGTGCCT	26799	26809	26819	26829	tilapia
28277:	---	TG.G	---	A...AC...CAG.ACA...-----A...G.CAC.TAA					pufferfish
38075:	TTCT...	CTG...	CA..TTT	AA.G....T.....					zebrafish_a
26830:	TTAGAGGCTTTGGTGGATGAAGAGTAGAAAGCCAGAGAATTTTAGAAATT	26839	26849	26859	26869	26879	tilapia		
28319:	---GTAT...TT.TA.AA.CA....TT..AAGT.TT..CG...A.T.CG						pufferfish		
20717:					.G.....GT...CC		horn_shark		
26880:	TGGTTTTTAAATGATTTAATTATTT-AAAAACA----	26889	26899	26908	26914	26922	tilapia		
28367:	.ACG.....-----G....ATGT.....CGA..TA.						pufferfish		
27598:			..G...CG.G.....-----				zebrafish_b		
20731:	AAT..C..C.T..T.....CT...A.....T.-----						horn_shark		
26923:	TTTGTGCATTCTTCAGTTGCGTTCACACCCATCGACAGT----	26932	26942	26952	26968	tilapia			
28405:	A.....-C..GA..T....-CA.G..AA...AA...T.TCTC..GG...					pufferfish			
26969:	CTTTGTCACGCGGCACTGCTTTTAAATTTTCGCGGATTTTCCAAGAATTTA	26978	26988	26998	27008	27018	tilapia		
28449:	..C.CA.T.ATA.TTT.....A.AT.C.....GTT..C.....						pufferfish		
27019:	-----ATTTTTTCCCAAAC-----TCTCAAGCGAAAAGT	27022	27032	27037	27047	tilapia			
28491:	CAAAACC.....T.ATT..TATGTTTGGTGACAG.T.T..A.TCG.GAA					pufferfish			
27048:	GATTTTACTACAAACATGTATAAAGTGACTTAG-----TACAATAA	27057	27067	27077	27088	tilapia			
28541:	AG..CAC.G.GG..T.AC..A..GAAAG.GC..TGGGGGGTC....G.G.					pufferfish			
27089:	ACGATCCGGACTAAACTGAAAATATGAACTTTTCAGATGCATCATCTCC-	27098	27108	27118	27128	tilapia			
28591:	GT.-----T.GG....G.....-A..C.A.C....AA.C..TAA					pufferfish			
27138:	----CAGATGTTTGATATCCATCACTATATCTGTAGGCAACAATATTCCA	27143	27153	27163	27173	27183	tilapia		
28633:	ACTG..C.CA....C..TTGCTCT.T..AT.-C.....G.GT.-----						pufferfish		
27184:	AACATTTCTGCTTTTTATTGCAGAGGAGCTCAGACTTGCTTTGGGCTG--	27193	27203	27213	27223	tilapia			
28676:	G....GAT.T.A.....-G....CA...A.---G....ATC.AT					pufferfish			
27232:	-CAGGATGGACAACATAAAAACAAGACATT-----TTGCCAAAGG	27240	27250	27269	tilapia				
28715:	TA.....-...T.A.....TTC..ACAGAGAAAAA.....				pufferfish				
27270:	CGAATTCTCCCTACAGTCAAAAAGACTTTTATTACCGTTAAGCTTTGTCTT	27279	27289	27299	27309	27319	tilapia		
28764:	..C.GC...TACT..C.T....GC.T...G...-----G.C...-						pufferfish		

27320:	27329	27339	27349	27359	27369	
28805:	GTGCCTTTGTTGGTGTGTTT	CAGCAGGCTCACACATTTT	AAATTGATTG			tilapia
	AC.T.....A.....	-----	GC.....	CT		pufferfish
27370:	27379	27389	27399	27409		
28837:	ACACCTTAACGCTACACCGGCTTAAAGCGAAATTGTATAATAAA-----					tilapia
	T..G-----	TTT...CT.....	G..AC...GT.C.G.CGTCTT			pufferfish
27414:	27423	27433	27443	27453	27463	
28881:	TTGTATTATTTGCTTATATTTTCCCACTTACATCACTTTTATCGTTTCAGG					tilapia
	.C...AAGC...TA.T.....	-----	T...T.A..C..ACC..A-			pufferfish
27464:	27473	27483	27493	27503	27513	
28924:	GGCTTGGCAGGTTATAAATATAGTACTTCCTACTGTCCTGTATAGCTAAG					tilapia
	---.C.A..A.....	C.A.AA..G.GTCGT.CCA.AT..CG.T.G..				pufferfish
27514:	27523	27533	27543	27553		
28968:	CATTGTGCTAACATTTGATTTGCATTGCATTTGTTGGAAAGTGG-----					tilapia
	.C..A..A...TG...T..GATA...TAT...T.CCCCT....ATCTTTT					pufferfish
27558:	27560	27570	27580	27590	27600	
29018:	-----ATGTCAGTGCTTCAGGCATTAGTGCAGTCGAGGTAATGCTTCC					tilapia
	AGGTCTC..A...C.TT..T--	TT.A..A..T--	A.C....C.--	T		pufferfish
27601:	27610	27620	27629	27639	27649	
29062:	AAAGCTTTTCTAAAGAACACATGC-ACGAATTACACAATTCAAAAATATG					tilapia
	GGT.G.....	T....TG.TCG.CCT.....	TG.G..			pufferfish
27650:	27659	27669	27679	27689	27699	
29101:	CATGGGTGTTTTAGAACTTCTGAATCGCGTTGCACCTCGTCACTTCAAGG					tilapia
	TT.TAT.C.....G.TAC..TTC..CA..G.A.-----					pufferfish
27700:	27708	27718	27723	27733	27743	
29139:	TAGCGCA-TAAGGAGAGGTGAGG-----CACTGATTGCTGTGCTGTCTTC					tilapia
	CGA....C....AC.....A.GAACA.....A.....				T	pufferfish
27744:	27753	27763	27773			
29181:	TTTCTCTGCCTCAGCTCCAAGATGGATATCGTT-----ACGTAGC-					tilapia
43074:	...T....T.C.....T.....T.T.C.CGCGCAGCT.....					pufferfish
			GTG...C...A			horn_shark
27784:	27793	27810	27820	27830		
29230:	CCCAGAGTGGGAGGGAC---TGCCCATCTTCCAGCTTTTCCATTGGTTTC					tilapia
43085:	.G.....	C..TT.....TA.....	T			pufferfish
39614:	.T.C.T.GA.....G.TTA..T...					horn_shark
77249:		TT..G....GTT...A....				horn_shark
			C.G.			Mouse

	27840	27850	27859	27869	27879	
27831:	ACAGTCTGCTCGGCGGAGAGGGGGTG	-CCTCTAATCATATCCAGCATGTT	tilapia			
29277:	C..A.A.T.....C.-.....		pufferfish			
73488:			zebrafish_b			
39638:	.A.....		horn_shark			
43142:	TC.T.CT.C..A...A-T.....CT...G..-		horn_shark			
81632:	T.C.....GA-TTG.....G...T.....		Human			
77258:	..-.CGCC.G.C.....T.C.....G.ATTG.....G...T.....		Mouse			

	27889	27899	27909	27919	27929	
27880:	TTGCACAAGAAATGTCAGCCAGAAAGGGCTACCTTCTCTCTTCGCCAAAA		tilapia			
29326:	C.C.....		pufferfish			
73507:	T.....A.T....TC.AC..T...T		zebrafish_b			
43180:	T...CT..A..T....GCT.....T		horn_shark			
81669:	T..G...C.....T		Human			
77307:	T..G...C.....T		Mouse			

	27939	27949	27959	27969	27979	
27930:	TACACCACAATAATGTCATGTTCCGGACAGCCCGTCAGGAAATGCGTTTCT		tilapia			
29376:	G.....C.....G.....T.		pufferfish			
73557:	..T.....AG.....C..C..T..T..A..T.....T..T.		zebrafish_b			
43230:	.G.C.....C.....C..A.....T.C...CT.C...T.		horn_shark			
81719:	..TC.....C.....C....G.....-C.CG..CT.T..T.		Human			
77357:	..TC.....C.....C....G.....TG.C.CG..CT.C...T.		Mouse			

	27989	28006	
27980:	AGTGGATTCTCTGATCAGT---GGCCGCAACG-----		tilapia
3:	C-----		striped_bass
29426:	A.....T..ATCG-----		pufferfish
73607:	G..A.....T.....CAC---.AA.GTC-----		zebrafish_b
43280:	...A.....CGTG....TGG-----		horn_shark
81768:	G..C..C..G..C.....CTCG...A.AGG..AGGCAGGCGGCGGTGGTG		Human
77407:	G..C..C..G..C.....CTCA...A.AGG..AGGCTGGTGTGGTGCG		Mouse

	28013	28023	28033	28043	
28009:	--AG-----AGCGGCGGAGGTCACTACACCGGGAGCGCCCTG		tilapia		
18:	T.....GG..		striped_bass		
29455:	T..T.CT.....G.A.....GG..		pufferfish		
73636:	---G.AA.T...CACT....CAAAAC...GAG.T		zebrafish_b		
43312:	--G.....AA...ACCT.T...C.TAAC...AG.G..		horn_shark		
81818:	GTG.CGCGGGGGGCGGCG...T..C...T....G..CACG...GGG.C		Human		
77457:	GT..CGCGGGGGGC---G.T..A..T..CT.....G..CACG.T.GGG.C		Mouse		

	28053	28063	28073	28083	28093	
28044:	TGCGTGCCTCACAGCACTGCTACAGAAGTGCCTTACGGACTACACAATA		tilapia			
53:	C..T.....C.....		striped_bass			
29490:	...T....C.CG...C.....T.....G.....T.....		pufferfish			
73671:	.A.T...AG-----GA.CT.C...TATT...T...GTCT...G		zebrafish_b			
43344:	.A.C...G-----CT.T..GC..T.....CACG..G...G		horn_shark			
81868:	.A.C...G-----C..CG.C..CC...C...G..G..G..G..G		Human			
77504:	.A.C...G-----...C.GC..CC...C...G..G..A.G..G		Mouse			

	28103	28120	28130	28140	
28094:	TGGATACTTCCAGGTATG---GGTAAGCGGAGCGAGGTGGGTCCACAAA				tilapia
103:	C.....A...A.....C...				striped_bass
29540:	AC..A.....C.....T..C.C.....				pufferfish
73715:	...C..T..TT.G..AC.C-----A....AGCAACT.G....				zebrafish_b
43388:	...CTT.....TC.C....A.C..A..C.....AACAACT.T..G.				horn_shark
81912:	C..GCT.....CACGC..GGC..C....C.AT...CA.CGT.G.CGG				Human
77548:	C..GCT.....C.CGC..GGCA.C....T.AT..A.C.CCGT.G.CCG				Mouse

	28148	28158	28163	
28141:	AC-----GTGGTTTCCGCCTCGGG-----CGCC			tilapia
150:	..-----A.....A.....G			striped_bass
29587:	.T-----A.....T.T..A.....G			pufferfish
73759:	.T-----..A..AC.TA.A.GT.....			zebrafish_b
43435:	GT-----A....CCTGA.T..TCA-----TC.T			horn_shark
81962:	G.AGCGGTGGCGGTGGCG-----G...C.AG.T.C....GCGCA..G.			Human
77598:	GAGGCGGTGGCGGTGGTGGCAGCG.G..CC.GG.T.CT...ACGCAT.G.			Mouse

HoxA10a:1

	28180	28190	28200	28210	
28164:	TACATGTCC---ACCATGGAATGTGGATGGACGCACAGAGGTCATGTCTG				tilapia
173:	G.....G.....G.....				striped_bass
29610:	G.....A.....				pufferfish
73778:	.C...A..A--AGG.....CA...T...GA.GTC.....C.....				zebrafish_b
43458:	...AG.---GGG.....G.C...TCT..TC.C.CC....T.....				horn_shark
82006:	...GG.C..TCGC...A..CC....C.A....G.CCC...T..C..				Human
77648:	...GC.C..GCGC..C.A..CC....C.....G.CCC.C..C..C..				Mouse

HoxA10a:1

28211:	GATGGA-----				tilapia
220:	A.....				striped_bass
29657:	.....				pufferfish
73826:	C..T..-----				zebrafish_b
43505:	C.....				horn_shark
82056:	GCCGCCTGACGGGCGCCGCCGCCGCCAGCAGCAGCCGCCGC				Human
77698:	GCCGCCGACGGGCGC-----GCCGCCAC				Mouse

HoxA10a:1

	28221		
28217:	-----CCAAGATCACCCGG--TAGGT-----		tilapia
226:	G.....A--.G...		striped_bass
29663:	-----T....A....C--.G..A		pufferfish
73832:	-----CAG..TAA--C..CC		zebrafish_b
43511:	-----G..A..T--C.ACC		horn_shark
82106:	CCCCG..GCA.C....CAGCC..CG-----		Human
77727:	CGCAG...CA.C--...A..C..CAGCAGCAGCAGCCGCCGCCGCC		Mouse

HoxA10a:1

28243 28253 28263

28236:	-----CCTCAGGTCGCGCCCTGCTCGTTCCCGC	tilapia
245:	C.....	striped_bass
29682:	-----T.C.....A.....A.A.	pufferfish
73846:	-----AA.TA.C..AC.G.....T...	zebrafish_b
43524:	-----AG..A..A..AA.A.....C.....C.	horn_shark
82132:	-----G....C.A.CT.G.....T...G...	Human
77773:	GCCGCAGCCACCTCAACCCAG..A....C.A.TT.G..T..TG...	Mouse

HoxA10a:1

28273 28283 28293 28303 28310

28264:	AAAATATAAAGGAAGAAAGCACCTACTGCCTGTACGAGCAGGCG---AAG	tilapia
273:	.G..C..T.....T.....T.....C.....	striped_bass
29710:	.G..C..T.....G.....T.....C.....	pufferfish
73870:	CC.CC....A..G....A.T.T.....T.A..T..TCT.A.---	zebrafish_b
43552:	.G.....C..A.....ATG.A..T..TT.A..T..TTCT.A.---.A	horn_shark
82160:	.G..C..C..A.....G..T.....C.....CTC....GAC..A	Human
77823:	.G..C..C..A.....G..T.....C.....TGCT...GAC..A	Mouse

HoxA10a:1

28320 28327 28337 28347 28352

28311:	TGCCCTAAAGCCT---CCACCGCTGAAGATCTCACATATT-----CAAGG	tilapia
320:	C.....T.....G...	striped_bass
29757:	..T.....A.G....C....G.....G...	pufferfish
73917:	A....AAA---..TTA.A..G..A.AT.G..C.-----GC..	zebrafish_b
43599:	..T..C...AGTG---.AG.A..AAC.....TT.CACG.TCC--....	horn_shark
82210:	C....T..CGG.....C.CC..A..GG.TCCC.TCCCG.GG..	Human
77873:	C..G.G.---.GG....C.CT....GG.CCC..TCCCG.GG..	Mouse

HoxA10a:1

28362 28372 28382 28392 28402

28353:	TTAACTGTAGCCGGCCAAGGGTCGAGTTCTTGTACAGTTACCGATGGCGG	tilapia
362:	GAC.A.....TG..C.....A.....	striped_bass
29799:	TC....A...TG..C..C.C...A.....A.....	pufferfish
73959:	C.G..ACC-----A.AC..A...C..TC..G.A.CAATAA	zebrafish_b
43644:	C.G..ATC-----AA...T.C..CAA..AT.AC..TAC.ACTA..	horn_shark
82260:	CCCG.C.C-----G.C..CT.-----C.CCCTG.GCAC.TC	Human
77920:	CCCG.C.C-----G.C..CT.-----C.CCCTG.GC.C.TC	Mouse

HoxA10a:1

28413 28423 28433 28443

28403:	CGGCGG-----GGGCTCAGTGCCTGTGCCGGGCTACTTCCGCTTGTT	tilapia
412:	CGGCGGCGG.....	striped_bass
29849:	.A...A-----CGG.....G.....T..A.....	pufferfish
73994:	...T.-----T..T..G....C..T.....TC...	zebrafish_b
43685:	G..T....C..C....T....TC...	horn_shark
82293:	.A....-----G....A..T.....C.T.	Human
77953:	.A....-----A..A..C.....C...	Mouse

HoxA10a:1

28453 28461 28469 28475 28485

28444:	CTCAGACTCA--CGCACATTTC--TCATAAACTTT----ACAACTCCAGCG	tilapia
462:	G.....A...A..	striped_bass
29893:	G.....A.T.A..	pufferfish
74029:	.....	zebrafish_b
43720:	.C..AG.CT.TC..-...C.AAA..G.C.....T.G.AA..-..	horn_shark
82328:	G.CT....-G..CCG--C..AGGG..A.GGCAG.GG.GG.G...	Human
77988:	.G...G.CT....-G..CCG--C..AGGG..CGGCAGTGG.GG.G...	Mouse

HoxA10a:1

28501 28511 28521 28531

28486:	GCCCCCAG----TCGAACCTTCCCATTTCCTTTGGCCTACACCCAC	tilapia
504:	C.....T.....	striped_bass
29935:	C.....C...T.G.....G.	pufferfish
43764:	.GG.A-.....T.GGG..CT.....GTGCCCCA.T.CCAGAT...-	horn_shark
82373:	..G.G...CAAC...GGG.TGG..G...CGCGCA...CC.GGGG.G.	Human
78033:	..A.G...CAGC....-TAGT..C..T..TGCAGCA...CC.GGGG.G.	Mouse

HoxA10a:1

28541 28551 28561 28571 28581

28532:	TGCTCCAGCTCGCTTCCACACGCCTCCAACCTCGACTTCTGCTCCAGCCA	tilapia
550:	T.....A...A.....A.....	striped_bass
29981:	C.....AGA.G.A.....CC...TT...G	pufferfish
43807:	..T.T.G.AA-----A..C..TT.T..AG...GA.C..GA.	horn_shark
82423:	G.T.T.GATC-----TC..G..CG.GCTAG.C..C.GCT.G.--	Human
78080:	G.T.T.GA.C-----...G..CG.ACT.G.C...GCT.GA.--	Mouse

HoxA10a:1

28591 28601 28606 28616 28626

28582:	CGGCACACGAGGGGAGGAACA-----CCGAGGGGCCTGTGTCTCTCGGGAA	tilapia
600:	G..G..A.....A...C.....	striped_bass
30031:	G..G..AC.....C.....C.ACA.C.G.A.G.....	pufferfish
82461:	..ATG.GGCC..A...G.GAGCCCT...TTC...GCC.C..C.---C	Human
78118:	..AGG..GCC...A...G.	Mouse

HoxA10a:1

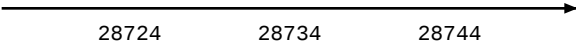
28636 28657 28667

28627:	ACGCAGACCTGCAGCCT---CACGCTG-----CGACGGGGACCGAGGAG	tilapia
645:	AC.....	striped_bass
30076:	G...A.....CGGG....C-----TC...T.G.....	pufferfish
82507:	T.G.T...G.....AG..GC.GGGGCT..CA...CGA.....	Human

HoxA10a:1

28684 28694 28704 28714

28668:	GCACGCG---ACTCCTCGGATGGAGACGCCTCGTCAGCTGAAGAAACAGA	tilapia
686:	G.....C...A.T..T....C..C..G.....	striped_bass
30120:	.TG.....G.G.....A.C...A.G...C...T..GG.....	pufferfish
28191:	T..TG...G.....G.....T.CTG.T..	zebrafish_b
82552:	..G.A..CGTCG.....	Human

HoxA10a:1


28715:	GGAGAACGACAAAGAGAGAGCAGCACAGTCTAATAAAGGTAAATGTCAC--	tilapia
733:	A..AC.T.....CA....A.A..C.C.....--T....CC	striped_bass
30167:	A..A.....G..C..G.....GACAGGC.CC.....GCC..GTC	pufferfish
28763:	-----GGTTCGTCTGCGCAC-----TTTTGTTTTGGTAGCGTTC	tilapia
781:	TTCCTTATA--...GT.GTCCT....TCTTA.....GCA.GCA.CA.	striped_bass
30214:	CTCCACATATA..CG..GT.-----C...CCA.AAA.CAGT...	pufferfish
28797:	AGGTAGAGTGGGGCTTT-----TTAATGACACCTGTCAAGTTTT	tilapia
829:	A.TT...TTGTTTTTTTC.....C.....C	striped_bass
30253:	AGT..A.TG.....C.G.AG...T....G.A...	pufferfish
28836:	ATTTTACTGGTCAGGGTGAGGTGACA-GTGAAGACACAGGTCTGTAAACA	tilapia
879:	...GG.....T..AC..CA..A...A..C...G...G..CAC.G..TTC	striped_bass
30289:	.C..A.....A.A.....A....C.TT	pufferfish
28885:	CTGCTTTTGCATATCACGTTGTTTCTTATGCTAACAAGACAAGATTCTGC	tilapia
929:	T.A.A..AA.....-G.GC..CA.GT...TG.TG.T..T..T..T	striped_bass
30310:	TCA.G.AAAAG.....	pufferfish
28935:	GAGATGTACCTCTTAAATTAGCGTGCATTTTTTCATGAATACACAGGAAT	tilapia
974:	TGT..A..TGCG.....G.GAT..A...G.G-----G.-----	striped_bass
30324:	-----A.CAG.C.TT.-----	pufferfish
28985:	TGCACTGCATAAAATTAAAAGCGAGAGGCAGTGGTTGTGAAGGAAAGTTT	tilapia
1016:	----.C.T.C..TT.A....T....T...G.A..A.AGG.C...AC.A	striped_bass
30335:	----...G.....G.CG..A.--	pufferfish
29035:	AATTTTGCCTAATTATACAAACCTACAGAGTGACATGAAACTCTTTATTG	tilapia
1059:	G...AG.TT.....CAT..GTTT...GCTAAT.TG.....AT	striped_bass
30349:	-----TGCT..TAT..TG-----G.A...	pufferfish
29085:	TCGTTATACAAGCACAAACAAATTAATAATACAAACCTACAGAGTGATAT	tilapia
1105:	.A.....TTTAT.TTTT.T.T...AC.....	striped_bass
30372:	-----G...AT.TC..TC..AAC.A...T...	pufferfish
29135:	GAAATGAAGTACGTCATATGATGCACGTTAAATACCTGCAGCTTTATCCA	tilapia
1139:	-----T.....TT..G..C....ATG..C...G...	striped_bass
30400:	ATG..TGGA..TT.TCG.....A.-ACA.....	pufferfish
30194:	.....	pufferfish

	29194	29204	29213	29220	29230	
29185:	GTGGTTTTTTTTTTTTTTTGA					tilapia striped_bass pufferfish pufferfish Human Mouse
1170:	CTGC-TGCATAAAA---AAGGGCCCGCA					
30449:	..A-----A...AGGC....G....TGT.CTA.TA.AT.					
30202:	.G.A.....A..C.					
34495:	C.....G....CA..CA.-.....					
21772:	G.....C...					

	29239	29249	29259	29263	29273	
29231:	TTT-ATTATTGAGGCTTTTATGTTTGTCCAG-----TGCTCTAACGTTT					tilapia striped_bass pufferfish
1210:	GGC-CA.G..TT...C.A.....T.T.T-----CA...T..C.					
30482:	G.CA....A..A.A.AA...TGC...A.TAGACAAT..GA....AT..G					

	29280	29297	29307	29317	
29274:	CTGTAA---TTTGCATCCA---TTTATGATACCAGAATAATGTTTGTGTC				tilapia striped_bass pufferfish
1253:	TCA.....T..CTC.....CC.A.A..CTG.-.....T..				
30532:	GCA...TGC...A..C.....G.CTC.T...C.C..				

	29328	29337	29341	29351	
29318:	CC-----TGTTTACGAT-TGGCGGAAA-----ATTATGTATATGT				tilapia striped_bass pufferfish
1296:	..TAAACTGTT...G...A..C.TA.A.GC.TTCGTGT....C.....				
30566:	T.....TC..T..C.....				

	29361	29364	29374	29384	
29352:	T-----GCTATAACA-----TCAACTGCAAGTCTGATGAATGT				tilapia striped_bass pufferfish
1346:	CATGTTTTCTAA...T..TGACTGTT..T...C...C...GC..C.C.				
30578:	-----..C.TT.T-----				

	29394	29404	29414	29424	29434	
29385:	AACAAAGAAACTATACTTTCCGCATTACACACACACACACACACACAC					tilapia striped_bass pufferfish
1396:	T.....G.C.....A.....A.G.....					
30586:	-----..C..TCTC.C.....					

	29438	29448	29452	
29435:	A-----CACACACACACACA-----CAC			tilapia striped_bass pufferfish
1446:	.AGTTACTGTTACTGTAATGTGTGTATA....AC..T.A-----			
30621:	-----T.....CTCTCT...			

	29462	29472	29482	29492	29502	
29453:	ACACACACACACACACACACACACACACAGAGTAATCCTTTTCATTTTCG					tilapia striped_bass pufferfish
1490:	.A.....TACT.G.T...ACT.G.T....T-----TC.CTG....T					
30645:	C-----					

	29512	29522	29532	29542	29552	
29503:	TACTTATAATCAGAAACATTTATGACATGGTTTATAACACTCTTATACTC					tilapia striped_bass pufferfish
1535:	CT..CTCTC.....C.C.CT.T...CTCT...					
30677:	-..AC.C...A.T..CA..AA..A-----					

	29562	29572	29582	29592	29602	
29553:	TGTTAATATGCAGCTAATGTTAAGTCTGTTTACTCTCCACTCCAAGCGT					tilapia striped_bass pufferfish
1566:	.C.CTC.C.CTCT..CTCTC.CTC...C.C.CT....TCTCT..CA.AC					
30700:	-----C...C.A.AA.T...A...AA.					

	29612	29622	29632	29642	29652	
29603:	GCAGTAGTGTTTTATTATAAGGTCACCTCATTATCTATTTAGATAATGTCA					tilapia
1616:	A..TACACACAC.CAC.C.CTC..T...TC.C...C.C.-----					striped_bass
30723:	A-----AC..G..GG.T-----					pufferfish

	29662	29672	29682	29692	29702	
29653:	AGATTTCAAATGCAGTTCATCAGTTAACTCTTACATCCACATTTTAAACAC					tilapia
1655:	-----C...CTCTC.C....C...CA....CACAC....					striped_bass
30735:	-----..T.C..A.A..AG..GCT.A.A.-----					pufferfish

	29712	29722	29732	29742	29752	
29703:	GTTATAAAACATTTATTAAATGCAGTCTTACCAAATATGGGGAATTTAA					tilapia
1690:	ACACAC.C...CACGC---.CA...ACG.A.A...C					striped_bass
30761:	-----..AT.AAA..AT.G...A-----					pufferfish

	29762	29772	29782	29792	29802	
29753:	GGTAAAGTGTTGCCTGTTGTTTTAATATGAGCGCAATGCAAACATATAGA					tilapia
30779:	-----..TA..A.CG.....T					pufferfish
32777:	...					horn_shark

	29812	29822	29832	29842	29852	
29803:	TTTTTTTTTAAAAACAACTATGCTCTTTGTCTGCCTTTCTCTTACACA					tilapia
1587:	C.C...CT..C.....C.....					striped_bass
30802:	.C.					pufferfish
30575:	C.T...CT..C.....AC.....					pufferfish
32780:	.C.....G.T....GG..CAT....TAGCC.....					horn_shark

	29862	29872	29882	29892	29902	
29853:	CAGTGGAGTTTCTCATGTTTACAGTGCCTAAACCCGTTTATCTACCATT					tilapia
1615:	..					striped_bass
1730:	C.....-..G.T...T....A..A.G.....G.....					striped_bass
30604:	..					pufferfish
75451:	..					zebrafish_b
45477:	TTCT.TC...C..AC..C...					horn_shark
83795:	...C					Human

	HoxA10a:2					
	29916	29926	29936	29946		
29903:	TCTT-----TAGGAGACACAAAAAGTGAAAACACGGCCAACTGGCTGAC					tilapia
1769:	T.....					striped_bass
30827:	T...CC...C...G...GG.....					pufferfish
39145:	G.GTTAA..A.....A..					zebrafish_a
75453:	..AG-----C.....TT.C.....G.GT..A..T.....					zebrafish_b
45498:	A...AC-----G..GGTG...GC.....GG.....T....					horn_shark
83799:	...ACATGCC...CA.TT.C...G.....G.A.....C...					Human
79466:	..C-----C...CAGTT.C...G.C....TG.A.....C...					Mouse

HoxA10a:2

29956 29966 29976 29986 29991

29947:	AGCAAAAAGCGGCGTAAGAAACGTTGTCCATACACCAAGCA-----CCA	tilapia
1813:	T..G.....C.....A.....T..	striped_bass
30857:	G.....A..A.....C.....G.....A..A.....	pufferfish
39169:	G--G..G.TTTA...G..A....-.....G...A..TACAT..T	zebrafish_a
75497:	G..G..G..T....C.....G.....C..T.....A.....T..	zebrafish_b
45544:	T....G..T..TA..A..A....A....T.....A.....T..	horn_shark
83849:	G....G..T..T..G....G..C..C..C....G.....	Human
79509:	G.....G.....C..C..T....G.....	Mouse

HoxA10a:2

30007 30015

29992:	GAC-----ACTAGAG-----CTGGAGAAGG-----AGTT	tilapia
1858:	G.....	striped_bass
30902:	T.....A.....	pufferfish
39214:	...TTAAAGAAG..A....ATATA...A...TAACAACCTTGTCTT...	zebrafish_a
75542:	T.....	zebrafish_b
45589:	C..G.....A.....	horn_shark
83894:	G.....	Human
79554:	G..G.....	Mouse

HoxA10a:2

30025 30035 30045 30055

30016:	CCTCTT-----CAACATGTACCTGACCCGAGAGCGCCGCCTAGAG	tilapia
1882:	.....	striped_bass
30926:	T..A.....	pufferfish
39264:	TT..A.CCTGCAGTAAA...T..T..GT..A..T..AG.....A	zebrafish_a
75566:	T.....T...A...A..T...C...	zebrafish_b
45613:	T.....T.....T.....T.....	horn_shark
83918:	T..G.....T.....T..T.....G.....	Human
79578:	T..A.....T..T.....G.....	Mouse

HoxA10a:2

30065 30075 30085 30095

30056:	ATCAGTAAAAGCGTCCACCTGACGGACAGACAGGTCAAAATCTGGTTC--	tilapia
1922:	T.....	striped_bass
30966:	T.....G.....	pufferfish
39314:	..A..TCCGC..T..T..G.....TC.....G..TAA.....GTCA...TCC	zebrafish_a
75606:	..T..CCGC..T..T....C..A.....A.....A.....T--	zebrafish_b
45653:	..T..CCGC..T.....T.....T.....T--	horn_shark
83958:	..T..CCGC.....C.....A..G.....T--	Human
79618:	CCGT.....C.....A..G.....T--	Mouse

HoxA10a:2

30113 30123 30133 30143 30153

30104:	CAGAACCGCAGGATGAAGCTGAAGAAAATGACGAGGGAAAACAGGATCCG	tilapia
1970:	A.....C.....C.....	striped_bass
31014:	C.....A.....C..C..G.....T..	pufferfish
39364:	..GT.....	zebrafish_a
75654:	..A.....AC.....G...GT..A.....C..A.....	zebrafish_b
45701:	..A..T.....A..C.....ACC..T.....T..	horn_shark
84006:	A.....ATC..A.....C.....	Human
79666:	T.....A.....ACC..A.....C..A.....	Mouse

HoxA10a:2

	30163	30173	30183	30193		
30154:	GGAAGTACCTCCAAGTATGGATTTTCGTGATGAACGAGGGAATC-----				tilapia	
2020:	...G.....C.....A.....TG.....				striped_bass	
31064:	...G.....C.....A.....TG.A.TTTAA				pufferfish	
75704:	C..GT.GT.AG.....TCA.T.....A...				zebrafish_b	
45751:	...G..T..AG.T...TCA.C.....A...A...				horn_shark	
84056:	...G.....AG.....T.AAT.....C.....				Human	
79716:	...G.....AG.....T.AAT.....C.....				Mouse	
	30200	30210	30220	30230	30240	
30199:	-----ACGATGAAACACGAGAAGTAAATTTAAAAACAAGAT					tilapia
2065:	-----AT.....T.GA....A.T-----					striped_bass
31114:	TTGGAAGG.AAT.AGT.					pufferfish
30415:	.A..A.....G..TT....CC					pufferfish
18577:	T.....T..A.A					zebrafish_a
26576:	G.A..A..A.T...C....AA...G...TAGC					Mouse
	30250	30260	30266	30276		
30241:	ACATAGGTAAATAAATTACA-----TCCGCCACCCACAC				tilapia	
2085:	---.T..CG....C..AG..G-----C..TATCTT..T...				striped_bass	
31167:	CC..CA...AAAAAATCCCCATA..AACTT.....				pufferfish	
30444:	...				pufferfish	
18599:	...				zebrafish_a	
26613:	..G...				Mouse	
	30286	30296	30306	30316	30326	
30277:	CTCCTTGTCCACACAAAGACTCGTTTCACCGTGGGGTGCAGCGTCCTTTA					tilapia
2118:	.A.T.....T..T....TA.....T.....AT.A.T.T....T					striped_bass
31205:	.AATCC....G.GT..T....A.....T...AA..C....A.TT.G.C					pufferfish
	30336	30343	30353	30363	30373	
30327:	ATTTCCAAACACG---CTTAATGTCAATGAAACGTCCTCTGTGAGCTACT					tilapia
2168:	G..TAA-GCT...A.....C.T.....					striped_bass
31255:	.CCCG..G...G.TTTT...GA.A..GCACGT.A.-----CGT.CT..					pufferfish
	30383	30393	30403	30413	30423	
30374:	GAGAAAAAGAAAAAAGGATCATCTGAATGTTTTGACTCTGTTTTTACC					tilapia
2217:	GA...GG..AA---ATA.....A...GT...A.....					striped_bass
31301:	..AT....C.C.GG.-----AT.T.G.C.A..CACT...A.....					pufferfish
	30433	30443	30453	30463		
30424:	CCTGATTGTGTTTTCTTTTATATTTCTTTTGTATTGTTGA-----					tilapia
2260:	-----T..C.G..G.CG.G...C.....C..CCTGTT					striped_bass
31341:	-----G..C...G..A-A.C.....					pufferfish
	30477	30487	30497	30507	30517	
30468:	TCCGTACCTCCGTCTTATGTGTGGGTAGTGTGTCAGTGCAGTTAAATC					tilapia
2301:	..T.....T..T..G...GT...A.....G.....T					striped_bass
31366:	..T.....GTT.G.A...GAA.CA.....T-----					pufferfish

	30527	30537	30547	30557	30567	
30518:	AGTGCAGTGAACACCCAACCACCCACCCACAAACACACACACACACAC					tilapia
2348:	-----A.TT...A.A-----					striped_bass
31404:	-----					pufferfish

	30577	30587	30597	30607	30617	
30568:	ACACACACACACACACACACACACACACACACACACGCACTCACAC					tilapia
2364:	-----					striped_bass
31405:	-----					pufferfish

	30627	30637	30647	30657		
30618:	ATGCACACACACATAGACCTGCGCCCTGGAAAGTGATGGG-----					tilapia
2364:	-----AT.T.....G.....CTTCAATTGTC					striped_bass
31405:	-----A-----T.TT-----C-----					pufferfish

		30666	30676	30682		
30658:	-----GTAAATCATCTTTTTTCATCT----AAATT					tilapia
2398:	CAATTATCCCCCCCACCACTA.C....A.....T.-----					striped_bass
31428:	-----A.....G.G.....CCT.TGCAC...A					pufferfish

	30692	30702	30712	30718	30728	
30683:	TGTAGAAATAATTTTGAAAAAATATTTAATTTTCA----AACTGCATGAT					tilapia
2442:	.AATC...C..A.A....TT--..C..T....A.TTGG..T.....G.					striped_bass
31457:	AAATT....C.AA...GCT--.T...T....GA.TTGG...GATG.AG.					pufferfish

	30738	30748	30758	30768	30777	
30729:	AAGAAGTTTTTATTTTTTATTTTTTCGAAGCAAATTTAAACCAAT-CTGG					tilapia
2490:	TTA...A....C.....T.....C...CC-G...					striped_bass
31505:	G.CTCAAACA.T.C..AC.....CAG.T...GG.A..T.C...					pufferfish
39728:	T.....T.....G.....					zebrafish_a
37074:	GC...C...GG.G...A...GA..C.-TG..					horn_shark

	30787	30797	30807	30817	30827	
30778:	AATATAATGCCCTTATATAACCAGGGAGAAATGAAAAAAAAAAATCCTTCA					tilapia
2527:	A....C.....G-----G...AA...					striped_bass
31550:	A.G.....A.G-----GGG.GTACG.G					pufferfish
37106:	..C.....					horn_shark

	30837		30851	30852	30862	
30828:	CCCTGTGACCATTAAATG-----TAGTAC-----TATAAGTCTAA					tilapia
2564:	..-A.....G.....CTACCATGA-----G.C..CT					striped_bass
31581:	.A-.A.....T...G...TTGCTA...GTACAACAACA...G.C..CT					pufferfish

	30869	30879	30889	30899	30909	
30863:	AAACT---ATGTATGAGCTGAATGTATAAATTGGAACCTCGTTCGCGTTG					tilapia
2605:	T-----A.....A.T..TTA...A.A...					striped_bass
31630:	C--..GAAG.A...C..T.A....G..TGCCTAC.A.GAAA.AA.-CC.					pufferfish

	30919	30929	30939	30949	30959	
30910:	AGGGCGTTTACACGAAAACAGTGTGCAAAGTGAAGGAGGAATGTTCTTT					tilapia
2650:	...A.....G.G.....G...C.....-T..A					striped_bass
31677:	...A.....G.A.-----T....AC...CG.GCAT..A					pufferfish

30969	30979	30989	30999	31009	
30960:	TTGTATATTTCTGTGTACATATGACATTGTGTCTTTTTGTGTAATGCTTA	tilapia			
2699:	.....	striped_bass			
31721:	A.....T.....T.....A.....TA..	pufferfish			
31019	31029	31039	31049	31059	
31010:	ATAAATTATCAGCTCGCACTGAACCGAAGCCGTTTGAATTTTTCTGCTG	tilapia			
2747:	T...GGA.T...T.C...T.....	striped_bass			
31767:	A.A..T...G-----G.....	pufferfish			
31069	31079	31089	31099		
31060:	TGTCCGTGTATGTTTTCTATAGAAAGAGACAGAGACAGAGAGAGAGAG---	tilapia			
2789:	...A....G.....A...C.T...T.TTT.ATC..T.T.TAT	striped_bass			
31796:	..CATA.C.GC.C.C.....	pufferfish			
36507:	G.T.G.G.T...G.GAG.G...G.---	Human			
34148:	G.....G.....	Mouse			
31113	31123	31133	31143	31153	
31107:	---GCTGGAGGGGGAAAGAAGTCTTGTCACAAATGTAAAGTTCAAAAATA	tilapia			
2830:	CATA.A.AC.CA.A...A.G.CA...TTG...TC...A.C.....	striped_bass			
31812:	---...A..CC.A..T..C-CT...CTTG.TG.T.C..A.C....G-C.	pufferfish			
36532:	---A.C.....A...G.GGAG..C.	Human			
34170:	---AGA.AG...AAG.G...	Mouse			
31163	31173	31183	31193	31203	
31154:	ACAGGCGCTCCTACACTTGATATTCCTTCTTTATTTATTTTGGAGTGTGT	tilapia			
2879:	.T.T.G.T.GTCCTG..GC.GG...A.	striped_bass			
13960:	G.G.G.G.G..T...C..	striped_bass			
31857:	...T-----AAC.	pufferfish			
20082:	...G.G.C..T.....	zebrafish_a			
31213	31223	31233	31243		
31204:	GTGTGTTTGTAGCAGCTGAGCAACAACTGTTTCTAAGCA-----	tilapia			
2932:	GAGG-----	striped_bass			
13979:	G...GTTG...A.A..G.	striped_bass			
31876:	..TGC...A..-GTTG...C..TTGT....T..G.A.AAATAATAAC	pufferfish			
20099:	G...	zebrafish_a			
31250	31260	31270			
31244:	-----CTACTGCACTGGCCATCGGAAATAATTAAAGATATTA-	tilapia			
2944:	-----T..T.A.....G.....	striped_bass			
31925:	ATTGCATGCAGCTT..TACA.AA.AGTG..CC.C.C...G.....C-	pufferfish			
46589:	...A.TA..G.T.C..TCT...T.A.....C	horn_shark			
31296	31306				
31280:	-----GGCTATA-AGCCGTCTAGCTGCATACCC	tilapia			
2980:	-----G...	striped_bass			
31974:	-----CC.-C.....T.....G...	pufferfish			
41269:	...A..A..ATG.TGAGTTT	zebrafish_a			
46621:	CTAGACGGTCGTAATTTGTCTG.....T...AA.GGT....T.ACGTT	horn_shark			

	31316	31326	31336	31346	31356	
31307:	AGCCGGCTATTGTAGAGTTTATGACTGGCTGGTATATGAGCTTTCTCCC					tilapia
3007:	G.....					striped_bass
32001:	A.....C.....G.....					pufferfish
41289:	.T.TA..T...G.TA.....TG.....AC.T.....GC.CG..A.					zebrafish_a
46671:	T.T.....T.....T.....T.....A.....CT.GG..G.TG.					horn_shark
85559:	.T.....T.....TC.....G..T..A.....CT.GA..G.GG.					Human
81235:	.T.....T.....TC.....T..A.....CT.GA..G.GG.					Mouse

	31366	31376	31385	31395	
31357:	TCTCCTCTAAGAGCTGCTTCAGTCGTG-AGAGAGTCTTTCGGACGGAG--				tilapia
3057:	A.....-G.....C.....A.....--				striped_bass
32051:	C..A.....A.-G.....C.GGAGA.....--				pufferfish
41339:	.T.T.				zebrafish_a
46721:	.G..T.GG.C...TG.T.....T.A.CGA.C...C.ACGAA...A...GA				horn_shark
85608:	.G..T.GG.CC..TGAT.....T.A.AG.G...CTACATA				Human
85752:					...G.--
81284:	.G..T.GG.CC..TG.T.....T.A.AG.....CGGCATA...A...GA				Mouse

	31412	31421	31431	31441	
31404:	AGGAG-GCCCGG-----CTCACAGCTTGAAAACCTGAACTATGCÁ				tilapia
3104:	A.T.....AC...T..T...G.A..				striped_bass
32098:	CACTCCCGGCA...C.G...CC...TT...TC----				pufferfish
46771:	..C..A..A.C-----..GG.TG.A.G...T...				horn_shark
85757:	..C...T-----C.....				Human
81334:	..C				Mouse

	31451	31461	31470	31480	31490
31442:	AACACACTGTGGATAAAACACGAT-TTCTGCACAAGTCTGGGAATAACTG				
3142:	G.T.....GTT.CG.....TTT...T.....-...				
32142:	C.TG...GT.....TTGCC...A..T.TGT.T.....-A..				

	31451	31461	31470	31480	31490	
31442:	AACACACTGTGGATAAAACACGAT-TTCTGCACAAGTCTGGGAATAACTG					tilapia
3142:	G.T.....GTT.CG.....TTT...T.....-...					striped_bass
32142:	C.TG...GT.....TTGCC...A..T.TGT.T.....-A..					pufferfish

	31506	31516	31526	31536
31491:	GGATTAACG----CGAGGATCGCGGTAAGTTCATTTCATTGCTGTAAATTT			
3191:	A-TTT.C.....-G.....-...T..CAA...GC....			
32191:	TA.....TCTTT.....G.CG...G...C...T..CAT...GTGA..			

	31506	31516	31526	31536	
31491:	GGATTAACG----CGAGGATCGCGGTAAGTTCATTTCATTGCTGTAAATTT				tilapia
3191:	A-TTT.C.....-G.....-...T..CAA...GC....				striped_bass
32191:	TA.....TCTTT.....G.CG...G...C...T..CAT...GTGA..				pufferfish

	31546	31556	31566	31576	31586
31537:	GTCCATTTTGC GCCTTGTTGCAGCGGGTTCAGTGGAGTGCATACAGCCCA				
3238:	G..C.....AT....TG.....-----				
32241:	.A.T.....ACT...T..TT.T...GG.....-----				

	31546	31556	31566	31576	31586	
31537:	GTCCATTTTGC GCCTTGTTGCAGCGGGTTCAGTGGAGTGCATACAGCCCA					tilapia
3238:	G..C.....AT....TG.....-----					striped_bass
32241:	.A.T.....ACT...T..TT.T...GG.....-----					pufferfish

	31596	31606	31616	31623	31633
31587:	TACAACACTGTTGTGGCTTTCTCAGTACATT---TTTTTTGGACACATGA				
3283:	----.T..A.....A-.....A...GACGA...G.....T...				
32286:	-----CC.CA-...C..GGACT.TAGCG-GG...G.....T...				

	31596	31606	31616	31623	31633	
31587:	TACAACACTGTTGTGGCTTTCTCAGTACATT---TTTTTTGGACACATGA					tilapia
3283:	----.T..A.....A-.....A...GACGA...G.....T...					striped_bass
32286:	-----CC.CA-...C..GGACT.TAGCG-GG...G.....T...					pufferfish

	31643	31653	31663	31673	31683
31634:	TGACCGAAGCGACGACCACGGTGCATTATGAACTGGCTGGCTGTGCTTTC				
3328:	T.G.C..G.....T.....AT.....-....				
32324:	...T..TG.A-----G.A...T.AA...T.T.....ATC.....-....				
41535:					
86387:	...G...GAG..AGC.				

	31643	31653	31663	31673	31683	
31634:	TGACCGAAGCGACGACCACGGTGCATTATGAACTGGCTGGCTGTGCTTTC					tilapia
3328:	T.G.C..G.....T.....AT.....-....					striped_bass
32324:	...T..TG.A-----G.A...T.AA...T.T.....ATC.....-....					pufferfish
41535:						zebrafish_a
86387:	...G...GAG..AGC.					Human

	31693	31701	31711	31721	31731	
31684:	TCTCGAGGCCCGGATC	--G	ACTGTCGAGTGGTTTAGGTAGTTTCATGTTG			tilapia
3377:	A.....	---	T.....			striped_bass
32369:	A.A.....	---	C.....			pufferfish
41542:	...GA.AATTT.A.C.A-					zebrafish_a
76754:		--A.....	CTA....A..A.....		T.....	zebrafish_b
47554:			G..T..A.....			horn_shark
86403:	CT...C..G.A.C.C.AGA		GTCG...A.....		C.....	Human
82088:			GTCG...A.....		C.....	Mouse

	31741	31750	31760	31770	
31732:	TTGGGGTCCATTTTC	-TAACTCTGCAACATGAACTGTCTTAATTGCCC	--		tilapia
3425:	.....	-	.....		striped_bass
32417:	.....	-A.....			pufferfish
41591:	A.TACA....	-A.....	G.....		zebrafish_a
76787:	C..T...TA..T.C.C.....		C.....		zebrafish_b
47585:	CT..AG...T...A.....		C.....C..G...A.TG--		horn_shark
86453:	A...CC.T-.CT...GA..G..C..C.....		C...C...A.TT--		Human
82119:	A...CC.T-.CT...GA..G..C..C.....		C...C...A.TT--		Mouse

	31788	31798	31808	31816	31825	
31779:	CAGTTACATACATC	GAAACCGAAAGTGAAGC	--AAATCTGG	-GGGATAAA		tilapia
3472:	C.....	C...A...GA.....	--	A...AC.....		striped_bass
32464:	A.....	G..A..T.GA....	CT....G..AC.....	GG		pufferfish
41638:	T...T.C..					zebrafish_a
76837:	G.G..T..G.AC...					zebrafish_b
47632:	T.GT.T...					horn_shark
86500:	.....					Human
82166:	GA.AG....					Mouse

	31834	31839	31858	31868	
31826:	G-AGGGTGAAATCT	-----GCTTTTTTTTT	-AAAAGTGGGAAGAGGTGTTT		tilapia
3519:	..T...GG.CT.-----	A.GACA.....	T.G..T.....		striped_bass
32514:	.TGTA...G..CT.ATATA.AGGACG		-----G...T...		pufferfish
39640:		G....A...AT.C.A.....			Mouse

	31878	31888	31901	31911	
31869:	TGGTGACACGTTACAAACCTTCCTA	-----TGTGGAAATCGGGGAGGG			tilapia
3556:	...AAG..T...GT.....	C...GG-----	TCAT.T.....	A..	striped_bass
32551:	-----TTT..CGG..T.....	GG-----	T.ATG.C.....		pufferfish
39666:	.A..				Mouse
40597:		.CT..GTTA....GGTTTCTA.T.A....	TA..T.CT.		Mouse

	31919	31929	31934	31944	31954	
31912:	G--TGGCTGGCTGTTGTGTACA	-----AGCTCAACCTGTCTTCCGTGGTG			tilapia	
3600:	.GG..A.....	T.-----	TT.CT.....	C.T..AA.C		striped_bass
32590:	..C..A.....	.C.C.T.-----	TTGCT..ATAC...C...AT..		pufferfish	
87059:			..CT..C..TT.TA.C		Human	
82674:					Mouse	
40636:	...CA.....C..C..C.A.TCTAGTT.CTGGG.				Mouse	

	31970	31980	31990	32000	
31955:	TTTTCTTT	----GGAATCCCTCCACTTGCTTTGCTTTTCTTCTTCTTCTT			tilapia
3645:	G.....	-A.CC.T...G...T.....			striped_bass
32632:	..GC.....	-ACCT.T.CA.T.....			pufferfish
87075:	.C.....	-CTTT.TT..TT...T.C..TGC.C.T.C..G...T...			Human
82676:	...CT...ACGTATTT.TA...T...T.C..T...CTT.CT..T..TT..				Mouse

	32010	32019	32028	32038	32048	
32001:	TTCCTCTCTT	GCTAGAA-CA	-GTCTGAGTGGGCACGTGTGCTGAATATCA			tilapia
3672:	----	TCGGC.T..A..-T.A.C.C...C.A..GT...--	A.			striped_bass
32652:	----	GTCGCG.T..A..G..G.CAG...A..A..TAG.ATTG..G.T.A.				pufferfish
87121:	...	T..CG...				Human
82726:	.....	T				Mouse

	32058	32068	32084	32094	
32049:	ACGTGATCAAAGCTGAGTTGCATTATA----	CATTGTGGACTTGGGATTA			tilapia
3715:	..AC.....	C....G....--TG.G.C.....			striped_bass
32698:	..AC.....	A.G....CG...GCCTG.G.G..A.....			pufferfish

	32104	32114	32124	32134	32144	
32095:	AGGGTAAAGCCGTGAGTGT	TTTTTCGTGAGTAGTAGTGACGCAGACACGCC				tilapia
3763:	...A-.....	T.C.....C.....T.....				striped_bass
32741:	...T-.....	C.....A....GC.TA..C.....				pufferfish
77048:				.AGT...GTG.AGA		zebrafish_b
87348:				.		Human
82966:				.		Mouse

	32154	32164	32174	32184	32194	
32145:	AGACAAGGCCCTCGGTTACGACCACTGCAGTGGAGGGGAAGGGGAAGGTGA					tilapia
3812:	.....					striped_bass
32784:	.....					pufferfish
41880:	.....	T...A.AT.				zebrafish_a
77063:	TAG.....	T...A...C.TTG.CCA...CC.CGT.C.C				zebrafish_b
48333:	.....	T..T..T.A..T----.C.CCT...CGC..A.				horn_shark
87349:	.....	T..T...				Human
40648:	.....	.C.G.A.A.....A.....A.G				Human
82967:	.....	T...				Mouse
84836:	.....	.A...GAA.....AAAA.				Mouse

	32203	32213	32227	
32195:	ATGGG-----	GCAACAGCGACCTCCGTGGGCA-----	AT-GAGA	tilapia
3861:	.....	T.....		striped_bass
32834:	.....		G....	pufferfish
77113:	..CT.....	T.A.A...CGCCC.C-ATTG		zebrafish_b
48376:	..TT.TTTTGTCTAC.A.....	G.C..		horn_shark
40674:	.G.T.....			Human
84859:	G....	..TG.T..		Mouse

	32237	32247	32257	32267	32277	
32228:	CCGGATGCTTCCA	CTGCGCAATAGTGGCTCAGACAAAAGGAGGGGAAGGG				tilapia
3894:	.....	G.....				striped_bass
32868:	.....	T...G.....C.C.....A.				pufferfish
77141:	.....	G..TG...G.....G..G...AA.ATAC..A..				zebrafish_b
44265:	.....	...A...T.ATTT..GAA..A.A..A.A				horn_shark

	32286	32296	32306	32316	32326	
32278:	CTTTA-TGGT	GATATTTAGATCCGCCAGACAGGCTGTTATCTGCAGAGGC				tilapia
3944:	.....	C.....				striped_bass
32918:	.....	C.....				pufferfish
77181:	.....	T...CC....C.AGC.A.A...C..A.T.ACA.C.C.A....				zebrafish_b
44293:	.C..G-CATAT.C.....	CTG....AT...AT.				horn_shark

	32336	32346	32356	32366	32376	
32327:	AAAAGAAGTGAATAGCCCTGCGGTAAACTGAGTGAAAAAACACCCTGA					tilapia
3993:	G.....					striped_bass
32967:	G.....					pufferfish
77228:	...C.GAGT.....TTA....GA...					zebrafish_b

	32386	32396	32406	32416	32426	
32377:	TTTAGGTTTACAGCCTTAGAGCCATTGGCATAAGTGGCGTCTTTTCCTGCT					tilapia
4042:	G.....					striped_bass
33017:	GG.....A.....					pufferfish

	32436	32451	32461	32471	
32427:	CTGAAGGTGTTTGTCT-----ATTCGAACTTTTAGTGACAAATAGGCGC				tilapia
4092:	...G.....T.....				striped_bass
33067:	.CA.....TTTCT..TTTG.....				pufferfish

	32481	32489	32499	32509	32516	
32472:	ACAGCCGCTCC--TTTCCCCCTTCGGCTTGTGTGATGTCTA---GCCAA					tilapia
4137:	A...AT..C...T.CCAT.....GTTG.....					striped_bass
33117:	..G.....T.--...TA.T.C.....C...GTTG.A...					pufferfish

	32526	32536	32546	32556	32566	
32517:	ATATTGTGCAAGTACCAACGAAGTGATAGCCCGCATCTAGAAAGCAAATT					tilapia
4187:	...A.....GT..G.....TT.G.A...C..T.T.C...					striped_bass
33165:	...A.-...C-...GT..G...G..ATT.G.A.G.TGGT...C...					pufferfish

	32576	32586	32590	32600	
32567:	ATGGACACCTTGTGCTTTCTT-----CTGTCTTCCTCTTTTAGATGC--				tilapia
4237:	G.....TC..T..---TC..T.GC.....C..AG...AA				striped_bass
33213:	.CA.GA.G.A..G..CC.T..TGGTACT.T.AGC..AAACA..AT.A.--				pufferfish
48886:	A.G.T...--				Human

	32614	32624	32639	
32609:	----ATCAGCAGAGAACAGATAATTTT-----TTCGTGTT			tilapia
4283:	GAGT.A.....TGG.A.G...C-----G.....			striped_bass
33261:	----TG...A.A.AT.G..C..G.G.TAAAATAAAATCTAAA.A.AGAA.			pufferfish
48899:	----CCT...A..GG....C...			Human

	32649	32659	32669	32679	32689	
32640:	GAATTGCCTGTGGCCTTGTGGGGAGTTGGCCAAGCTCTCAGTTTATTTG					tilapia
4318:	T.....T..C.....					striped_bass
33307:	A..GAA.A.AA.AATGAACA..A.---.A.T.G.A.TA.-----A					pufferfish

	32699	32709	32719	32729	32739	
32690:	CGGGTAATAAAAAAAAAAACGGGCATGCAGTACGTGAAAACCTCAAGGTTG					tilapia
4367:	.T.....T....C.CGC...G.AA--.GT.C..G.....					striped_bass
33349:	---.GGG.GG..C-----T.CAG...--CA..A					pufferfish

	32749	32753	32763	32773	32783	
32740:	CTTCTTTGAAA-----CCTGCAGTAGTTAAATTCTCAGATTTAGGATTT					tilapia
4415:	..G.....TGGACGTTTT...A...GGG---.T...G.T...A.					striped_bass
33380:	.A.T..CTT.T-----GA.-.A.G--.T.TT...GC.T.AC					pufferfish

	32792	32802	
32784:	AATGGA-----	CACGACAAGTTT	AGG-----
4461:	T.....	CGCTGATACGCACACAGCCAG....	TTT...AA.A.CCACCTTG
33417:	...AT.-----	TTT..TT..C.A.AT-----	

tilapia
striped_bass
pufferfish

32805:	-----	
4511:	AGTTTAAGTCACTGGTGTATTTCTGTTATATAGGCTACGCAAATTCTCAG	
33438:	-----	

tilapia
striped_bass
pufferfish

	32807	32817	
32805:	-----	CTTACAGCACCAT	-----
4561:	TATACTGTGAATATTGT.....	A..AT..ATTTACAATTAAATTGTATT	
33438:	-----	GCA..TTG.-----	
29374:		.A..G.G.-----	

tilapia
striped_bass
pufferfish
zebrafish_b

	32824	32834	32844	
32818:	-----	GTTTTTAAAAACGCAAATAAATTCTGT	GTTA-----	
4611:	GTATTAAATTGAA.C..CA.C..TA....	GGT..CA.T.A..TAATTTA		
33447:	-----	AC.A.GGCT..T--...G..GA.T.TA.TAT----		
29382:	-----	.C.....CCC.....TT...GCC..A.A...AG----		

tilapia
striped_bass
pufferfish
zebrafish_b

	32850	32860	32870	
32849:	-----	AGTTCTAAATGGGAAAAAACTG	-----	
4661:	ATCTTCAC.CC....	GCG..CT.TTTT...AATGTTTATTAATTAATTAC		
33478:	-----	.T...C...C...TCT...AACGCTTTTT-----		
29415:	-----	.TC.		

tilapia
striped_bass
pufferfish
zebrafish_b

	32885	
32871:	-----	AAAATACA----GTATATT
4711:	ATTTAATTTCTTTGTTTAATTGTATAATCTC..TC.T..CTACA.....	
33510:	-----	.T..ATT-.CG....

tilapia
striped_bass
pufferfish

	32895	32905	32915	32925	
32886:	AAA-----	TGTATCCTGGTGCAGGCCATTCCCCGCGCCATTTCCT			
4761:	T..AGTGTGCTTTC..G..TC....TTCT...C.G.T...A.....AA.				
33524:	T..-----	.C..T-----A.T.A...AGT...C--			

tilapia
striped_bass
pufferfish

	32935	32945	32958	32968	
32926:	TTTAAAAGGGGAAACCACAAACACC-----	ACATTACATTTATTTTT			
4811:	A.....	GGCA.....			
33549:	-----	.A.....TC..AGGCTGG.T....GCAC.....			

tilapia
striped_bass
pufferfish

	32978	32988	32998	33008	33018	
32969:	AGCTGCATATAAGAGTAACGTTACACCGACGCCCTGGCACCTAGCTGGTA					
4854:	CT..T.G..T.....A.....G..A.....TG.....A..C.					
33586:	C.G.T.G..C...G..C.G.T.TA..A.T.CT..TG.CCAACCAC.					

tilapia
striped_bass
pufferfish

	33028	33038	33048	33058	
33019:	TTACAGATAATTTGTTAATGGCAGAGATGATACAGGCATATA-----				
4904:	...G..T.....G....TG.T.....GCAA.....GAGGCCCA				
33636:	T.....G....G.T.....GCAA..A.C.GGGGCCCA				

tilapia
striped_bass
pufferfish

	33069	33079	33089	33096	33101	
33061:	-CTAAGTGAT	AACGGCGGT	GTAATAATAA	ACG---	GGTTAGA----	AT
4954:	TAC.....		G..GCA....	AGCGAGA.A		
33686:	-.A...C.....	T.....	AG...A---	C....A.-----		

tilapia
striped_bass
pufferfish

	33109	33119	33129	33139	33149	
33102:	CAGGC--TCT	GGTATTTTTT	AAAATAATA	AATTACATATA	TTATTTATTAG	
5004:	.C...AA..C	.CC..C-----	AG...G.....	GGA.A		
33725:	--.G--.T	.CC..C.-----	.G.GGAG	.ACCCAA..		

tilapia
striped_bass
pufferfish

	33159	33169	33179	33189	33199	
33150:	TTAACCACTT	CTATAATTT	CAAAAGTTT	TGGCAAGCGT	GTTTGAATTCAG	
5037:	A.-----	T.....	TA..C...T	C....G..C.G....		
33753:	AC.-----	T...C-----	.C.AT.G	G.AA.-----	A	

tilapia
striped_bass
pufferfish

	33215	33225	33235	
33200:	CGGATT----	ATTTCAAATC	AGCAAAGAATT	TATGCATTTAATTT-----
5075:	.A.G.----	G..AA.....	TTT..CCACC..---	T.....TCTTT
33777:	.AA.A.CCAC	.G.G.GT..T	TT...AG.G.	-----
42767:			...T.C.C.....	-----

tilapia
striped_bass
pufferfish
zebrafish_a

	33242	33252	33262	33272	
33241:	-----A	TTTCTATTTT	CTATTTCTTT	TTTTAAAAA	
5119:	GCTCGTTT	TAAATGGATGT	A.....A..T..A..T..	ATG...G----	
33813:	-----		T.....	-----	
42780:	-----	.C..C.A...T	T...TT..T...		

tilapia
striped_bass
pufferfish
zebrafish_a

	33282	33296	33303	
33273:	ACACACACAC	GCACAC-----	ACACACGCA-----	CACACA
5164:	-----T..C..	TTTTGTA.....	TT.GTACTTTATATTT..T	AC
33820:	-----	.A.T.A----	AA.T.A.TTT.	-----

tilapia
striped_bass
pufferfish

	33313	33323	33333	33343	33353	
33304:	CACACACAC	CACACACTAG	GCCTGCTT	CACGGCACGTT	ATGTTTATA	
5205:	GT..A.GT..T	.G.TAT...AA.	-----T....TA..T..			
33841:	T....GTACT	.TG.CA.T	.CCAAAA-----	A...TAT		

tilapia
striped_bass
pufferfish

	33363	33373	33383	33393	
33354:	TTTGTCAAG	AAACAAATAT	ATATATTATTA	AAATTCATATATT-----	
5244:	.....	-----	.C...G.CC.G	GGT..T.C.C.G	AATTATAG
33878:	G....	-----	.GC..G-----		

tilapia
striped_bass
pufferfish

	33404	33414	33424	33434	
33396:	-----A	TTAAATTCAG	TTACAACGTA	ACTGATAAATCT	ACTAAA
5283:	TCAAACCAACA	.AGTC.GA.AC	T..GAA	.G....T.GGG..	
33889:	-----T..GTT	.G.A...T..T	TACCG-----	T....T	

tilapia
striped_bass
pufferfish

	33444	33454	33464	33474	33484	
33435:	AATACTCAA	ATAAGAAAAC	CTATTATTAT	TCTTTTTAAA	ATCTGATTTAC	
5333:	..-----	..TCCTG..TC	.T..T.CT...GTT	G.T		
33920:	..-----	.T..C.TTT	.AA..G.G..GAAT	.C...C....	-----	

tilapia
striped_bass
pufferfish

	33492	33502	33512	33520	33530	
33485:	CA--AAAATAGAAAAAATAAAACAAAACATCCTTTCA--ATTCTCCTGAA					tilapia
5376:	TGTTG....TTTC.....T..T.C..A.AC...T.AAA.T.					striped_bass
33955:	-----GCGG...T.TGT.T.GTTCT.-----T.					pufferfish

	33540	33550	33560	33570	33572	
33531:	ACAACGACACGTTTATTGATGTAGTTAACATAGATAATTG-----AC					tilapia
5422:	.T.TTCT..T.....T..C..-----					striped_bass
33989:	.T.-----TA.A.T....A..A.T.A..GA...G.ATTCATATT.A					pufferfish

	33582	33592	33602	33612	33622	
33573:	ATAGTTAATTTAACGCTATAGTGTGTAATTTTTTTTTTTTGACGAAAAT					tilapia
5448:	-----C...T...AGA.A.G.ACT.CA.AG.CC-----					striped_bass
34034:	.ATA..T.GG...TA....C-CG.ACC....A.....A.....					pufferfish
22404:	..A..G..AG.CT....CA.....A.....A...					zebrafish_a

	33632	33642	33652	33660		
33623:	ACTCAAACCTCCTGCAGGAGCGTAAATTTGGTGGAAC--TTCGTGTA---					tilapia
5478:	-----TT.TG.....TA...GG.G.AGA.G---					striped_bass
34077:	-----AT.CT.TA.A.-----TAC...TT.G.TA..GCAT					pufferfish

	33677	33687	33697	33707	33717	
33668:	TTGTAATGAGGTTAATTAGGCGTCAGAGACTTAGTTCCAGCGTGACGGT					tilapia
5508:	...A...TA.A.....AT..T..G..TG...C...A.A.--.A.G					striped_bass
34108:	..AG...A.A..AT...T.-.T.T..-----AT.A--.T.AG					pufferfish

	33727	33736	33746	33756		
33718:	GACCTGAAGT-----AGTCAGGAAGCTTGTTGTGGTAGAAAAA					tilapia
5556:	...G...ACGTCCATGTCTA.A...CA..AAG....AAT...T....					striped_bass
34145:	A-----T.CGGCCTTTTCTA.A...CATGTTA.TT..A.T-----					pufferfish

	33766	33776	33782	33786	33796	
33757:	TAACCCTATACGAGAATTTT----CCATGTA-----GTCTGCGCTTAAG					tilapia
5606:	...GA.C.A.TA..C...A.----G.T.A..TAATCA..A...TA..T.					striped_bass
34182:	-----A.TGAAA.G....-----T.					pufferfish

	33806	33816	33823	33833	33843	
33797:	GTTTAGCTCACATAGGAATACA---ATTTTGTGCGAGCTAAACGTTTAACT					tilapia
5652:	T...TA.TTTT...ATGAG..ACT..C...GTG.....T...A...					striped_bass
34203:	T...TG...G...-----G...A-----T..C...A.					pufferfish

	33859	33869				
33844:	GAAAACTAC----TCAGCCTTAGGTATGTTTCAT-----					tilapia
5702:	TA..AATT.T....A.TA..A.A.A..CCCCGCATGTATTTTGG					striped_bass
34236:	A.GG-----T..AT.AT.CC..A..C..A-----					pufferfish

	33881	33891	33901	33911	33921	
33874:	--TATTGGCTAGCTTTTTGTGCGTATGATATATTTAATGCTTTAAGCT					tilapia
5752:	TG...T.TC..T..GG.T.-----A.A...G...G.AA...G....					striped_bass
34261:	-G..AGTCTC..T.-----A.G.G.G.--A...A...T.A.C					pufferfish

	33931	33940	33945	33957	
33922:	GTAGCAAAGAAAA	-ACCTGCAGA	-----GGAAAGCGTC	---TG-----GC	tilapia
5798:	.A.AA.C..G...	.TA.A..C.-CATT	GAT....	-----ACACA..	striped_bass
34297:	.AGAA.TG.G...	.G..GG..TGGGT	.G.GA....GGT	..AAAACA.	pufferfish

	33967	33977	33987	33997	
33958:	CTGTGGGGAGAAAAAA	ACTGTTATAAACT	GTTATAAAAAA	ACGAT----	tilapia
5843:	.GAAAA....C....	T.....A.....	GT.....	-----GTA.....	striped_bass
34347:	GGAC.T.CCT.C.T.T	A.AAC..T	TA..CTGC		pufferfish

	34010	34020	34033	34043	
34004:	---TCATAATTCACTAG	TTAGTCT-----	TATTCAGATCATT	GAGCTG	tilapia
5878:	---.TC..G..G.G---	CT.CA-----	GT.....C---	G..T....	striped_bass
34390:	GTA..C.....T.G.T	...GACGCCCAGGT	ACTG....CG--	.....	pufferfish

	34053	34063	34073	34083	34093
34044:	CAAAGTTTCTGTGAT	GTGGTGCTGTTTAA	AATGCGTTTTTGGT	GAGCAGCG	tilapia
5914:	.T.....T.A..ACA	G.....	T.....	A	striped_bass
34438:	.TG.C...TCCCA..A	T..TG..G.....	T.A.....	C.....	pufferfish

	34103	34113	34123	34133	34143
34094:	ATCGTAGGGTGCTTAC	GTGTCCTATAAAAC	GTCTCGTAAAGA	AAGGCTTC	tilapia
5964:	..G.....G.....	GTAC.....	T....T...		striped_bass
34485:	---.....A.....	T.....TAG.....	C.....		pufferfish

	34162	34172	34182	34192	
34144:	CAAATACAT-TTTGTAT	CGTTTTTGGATAAC	CGAGAGGGGATT	GGAAGTGC	tilapia
6014:	A....-A.....	A...A.T...	TT...A..		striped_bass
34532:	AG...AA.A.....	GGCGG.TGA.AA..	CG.TT...A..		pufferfish

	34203	34213	34223	34233	
34193:	AGCAA-----GTGCC	AATAAGAGCCTGGG	GTCATTTTTTTT	A	tilapia
6063:	..T.GTAGG-----	AA..CAC..T.AA.T	A-----	A..C.	striped_bass
34582:	.T...TAGACTCAGAC	AG..TACT.T.AA.A	A-----T....	A..C.	pufferfish
23278:				..A.....	zebrafish_a

	34243	34253	34261	34271	34281
34234:	TTCATTTCATATTTTT	CATCTCGCA--TAG	CAGTTCCTGCTCAA	ATCTTGA	tilapia
6102:	G.....CTG....A	.GA..A..A..TAA..	A.T.....		striped_bass
34625:	AAT...TT..C...C	...AA.GAC.A..	-----T...G		pufferfish
23286:	..T...T.....G.C	...			zebrafish_a
43746:			A.T.TG..CTC	...	Mouse

	34293	34303	34313	
34282:	TAATTCTTA-----	AA---AAATTGAAGT	TGTTATAGGAGAG	AGGGTGA-
6152:	GCTTT.....	C.A..G.....	C.....	
34664:	C..C.....-C.TTT	...G.GGA.....	G.....	
43764:	.T..AA.A.-----	GA.CT.....	T.T.A.A..TTC	.GT

tilapia
striped_bass
pufferfish
Mouse

	34332	34342	34356	34360	
34323:	GTATTTAATGACCGTAGGGATTGA-----TTTATCCTTTAT-----TG				tilapia
6198:	AA.....				striped_bass
34708:	C..AG.....				pufferfish
78564:	.A....GA.C.C..GCTAGGC...CC.....CTCCCAC..				zebrafish_b
53159:	AT.....				horn_shark
90337:	...GC...G.....CG.G.....				Human
85959:	...G.....CG.G.....				Mouse
43806:	.C...A...AGA.A....				Mouse

	34379	34389	34399	34409	
34361:	TTCAGCCTT-ATGATCACGTGTGTCTGCTACCCAATGGCATGGCAGCCTG				tilapia
6236:	T.....A.....				striped_bass
34746:	G..G.....CGC...G.....A...C..GC.T..				pufferfish
43936:	...G.....GTCACCTC.....CAA.....CTT..				zebrafish_a
78606:	...TCT.CC-.CAG.....CC.AGCAC.....CCA..CT.T..AGT				zebrafish_b
53180:	..GTTTT.--GA.....A..AACT..G.....A..TGCT				horn_shark
90363:	...T..TGG-.C.GG.....ACG.GCACGG.....GGGC..G.-GC.				Human
85979:	...T...GG-GC.GA				Mouse
46761:	AC...A.C.G.....TGA..C.....				Mouse

	34419	34429	34439	34441	34451	
34410:	TCTCCCCATTACTTTCCCACTGTAGTTCTCT-----GTGGAGCGAAG					tilapia
6286:	A.....AG.....G..C...					striped_bass
34796:	A.....AAG.....G..C...					pufferfish
43975:	CTCT.AAC...T.A..TG...GG.C.T.GA-----A..G....					zebrafish_a
78655:	GA.T.AAC...TCAGAGGT.C.....A.A-----C.A..TC..					zebrafish_b
53228:	...G.A.CA..T.AGTAG.....C..G.....C..C.GT...					horn_shark
90411:	C.GG.AAC...T.AGGTG.....C...C.CCCCG----..CCA.C...					Human
86027:	C.GG.AAC...T.AGGTG.....C...A.CCCCCCTG...CCA.C...					Mouse

	34457	34466	34476	34490	
34452:	----TTGCTAC-TTGATTTCTCCACATTGTTATTTT-----GTGAGGCT				tilapia
6328:	-----C.....				striped_bass
34838:	-----A..				pufferfish
44016:	-----CT..-CC....TCA..T...C.....T--				zebrafish_a
78697:	TAGT.A.T...AA.GG...C.GC.....A.TCA--				zebrafish_b
53269:	-----T...A...AA...G.T.T..CA-----CA....				horn_shark
90457:	-----T...-A...AA...G..GT..CA..A.....CC.T..G.				Human
86077:	-----T...-A...AA...G..GT..CA..A...CGGCGG..CG...				Mouse

	34500	34510	34527	34537	
34491:	GGGTTTACTGCGTGTGTATG-TGTGTGTG-TG-GTGTGTGTGCGCGTCTC				tilapia
6367:	G..T.....T...T.T				striped_bass
34877:	.T.....A.....GTG..T...C.C.C...T..T.T				pufferfish
44053:	-.TG.C...TA....G..T.A.T.T.AA..T.....T.T.---				zebrafish_a
78738:	-.T..C.T..T.G.....C-C..CC.GC-----				zebrafish_b
53307:	-.C..G...T.....CA.....				horn_shark
90496:	C..				Human
86122:	...				Mouse

	34547	34557	34567	34577	34587	
34538:	GCTTTTGCATGCATCCGCTGTATGACTGTGTACATGTGAAAGTGTAATTT					tilapia
6416:	A.....T...T.T.....C.....C.CA.....					striped_bass
34926:	A.....ATGCA.C..T-----A.....CT.AG.....					pufferfish
44098:	-----G....A..G..C.C-----					zebrafish_a
78767:	-.C.C-----C.T...T..					zebrafish_b
53324:	-----					horn_shark

HoxA9a:1

34597 34607 34617 34627 34637

34588:	TTCTGCC	ATGTCGACATCTGGAACGCTGACTAGTTACTACGTCGATTCCC	tilapia
6466:	C	C.....A.....	striped_bass
34966:	A.....	C.....T.....	pufferfish
44117:	C	C...G.TT...AG.A.....T..C..TA	zebrafish_a
78783:	..T..TT	TG.....A..A---.....CT..C..A.	zebrafish_b
53324:	-C.GAGA	A..G..TA.C.GC.A...T..T....C....	horn_shark
90528:		...G.C..CA...GG.C..GGC.AC.....G..C..GT	Human
86143:	A...G.C..CA.C..GG.C..GGC.AC.....T..G..C..T		Mouse

HoxA9a:1

34647 34661 34669 34679

34638:	TCATTCTCCCCGAGAGC	-----GAGGAGCTCTCTGT--GCCGAGGTACA	tilapia
6516:	G.....	-----A...C	striped_bass
35016:	.G....A.....A.	-----A...T	pufferfish
44167:	.TG..A.A..G.GC.	-----A.TC.C.T.T	zebrafish_a
78830:	A....CA.A....AT	-----C..T.AT.TG.C--A.....T.T	zebrafish_b
53373:	.T..AA.G.AT...A.	-----T..GCTGTC--T.C..A..TG	horn_shark
90571:	..C.G..GGG..CCGA.GCCGCG..T....GAGC..TG....CTA.G.G		Human
86191:	..C.G..GGG..CCGA.GCTGCT..T....GGG..CGG.A..CTACG.T		Mouse

HoxA9a:1

34689 34706 34716 34726

34680:	CCTCCGGTCC	TGGGCTC---CAGCACGCCAGGCAGCATGCCTCCATCAGC	tilapia
6558:	.....	.....T..A...TCC.....A...	striped_bass
35058:	..G.T.....	A.---.....AG...A...CC..T.....G..	pufferfish
44200:	...G...TTA....TATT	-----CAACCATTCTACCTGCA	zebrafish_a
78872:	.A..T..A..C.T.G..CAG	GT.TC.TG.A.TGA.GCTAC.---T	zebrafish_b
53415:	.G..G...T.ACT.GCT	-----GCTT....GCA.---.C.T.CT	horn_shark
90621:	..GGG.AC.....	-----CTC..C....GCG..GA.GC.GGC.	Human
86241:	..AGG.AC.....T	-----A.C.C.A.....GCG..AG.TC.GGC.	Mouse

HoxA9a:1

34733 34743 34753 34763 34773

34727:	GAC---	CCCAGCGAGGTCGGGACTTGACACCTTCCCATCCAAGCCCCAGGT	tilapia
6605:	A...T...C.T....C.....	G....A..T.CT..	striped_bass
35105:	...CCG.A.....C....A..C....G.....	T....A..T.C...	pufferfish
44247:	TTTCA..CC....CC.C....A....	GG.A...AA.CC..	zebrafish_a
78919:	..A---TAT....ACAA.A.C.C.AT..T....	AGG...AT.ATCCA.	zebrafish_b
53459:	..G---A.CC....CT..TCCC.A....A....	AG..T..AG..ACA..	horn_shark
90666:	..G---A.CC....CT..A.CC.G....G....	AG.....G.GAC..	Human
86286:	..A---A.CC....CT..A.TC.....G....	AG.....G.GGC..	Mouse

HoxA9a:1

34783 34790 34800 34810 34820

34774:	ATTCGGGCCGTCG---	TGGAGCCACGTCCCGGCTCAGTTTCCAGCCACCG	tilapia
6652:	.....	T..T..C....C....G....	striped_bass
35155:	G....T.....	T.....C....G....	pufferfish
44294:	T.AT..TA.C..AGAT...G.G...A....	AA.G..C..CT.CA.TGGT.	zebrafish_a
78966:	T..T..TG.....	T.C...G.A.-----CA.AGG..	zebrafish_b
53506:	T..A.CA.C..C---	CG..T.AT.....AGCT.T...ATA	horn_shark
90713:	G..T..CG.C....	A..CA..G.AC..GGC.GGCG.CAA.G.T.	Human
86333:	G..T..TG.C....	A..CA..G.AC..GGC.GGCG.CAATG.G.	Mouse

HoxA9a:1

34830 34835 34845 34855

34821:	TCTCCTCTGT-----GTATCATCCCCACTACGGGCATCCC	tilapia
6699:	A.....T.....	striped_bass
35202:	G.....C.....CA.....T.....AT	pufferfish
44344:	.AC.G..A.....AT..AG.C.C.T.C..A..T	zebrafish_a
79004:	CA..TATC.C-----CT.C.A..CA..ATT...A.	zebrafish_b
53553:	.GC..A.....T...A..CT...AT.....	horn_shark
90760:	.AC..G...CGGTGTACCACCACCATC.C..C.A..C.....T..C..	Human
86380:	.GC.TG...C---AGTGTATCATCACC.C..C.A..C.....T.....	Mouse

HoxA9a:1

34865 34873 34882 34899

34856:	CAAGGCCCACTAG--GTGGAGATAC-AGATGGCCGGTAT---CAATCCTG	tilapia
6734:	G..C.....C.....C.....G..A..	striped_bass
35237:	..G..T..G..C--CAC...A..-C.....T..C.....G..T..	pufferfish
44376:	.C..T-----T...GGAT...GTG..G..T..	zebrafish_a
79036:	.C..T.TT..AC.....C.G-C.....AGCA.CCGTG.GTC...	zebrafish_b
53582:	..G.CT..GA.T--CC.CC.CGC.-C...TA...CATG.GC.....	horn_shark
90810:	..G.CG..C..G.CG.C..C.GCG.CG..C..A...CATG.GC.....	Human
86427:	..G.CG..C..G.CG.C..C.GCG.CG..C..A...ATG.GC.....	Mouse

HoxA9a:1

34909 34919 34929 34939 34949

34900:	GCTTCTGGAGCCCATGTCCGGTTCCCTGCCGTTGACCGGATTACCGACGA	tilapia
6778:	...G.....T.....T..CA..G.....	striped_bass
35281:	.T.G..T...A.....CA..G.....A...	pufferfish
44405:	..CT...TT.TGCA.GT.---GT.A..TCAA..T.AGCC.....G	zebrafish_a
79080:	.GCGT.A..A..GC..C.T---A...A..C..G.....T.C..AG	zebrafish_b
53629:	-----A..T.....C.G..AA...CT.C..TC.....TT.C..	horn_shark
90860:	C.....G.G..CT.C..CG.G..C..G..CT.C..	Human
86477:	-----A...C.C.....G.G..CT.C..CG.G..C.....CT.C..	Mouse

HoxA9a:1

34959 34969 34979 34989 34999

34950:	CCCATCACTACGGGATCAAACCGGAGGGACTGGGGACGCGAGCTGAAGGA	tilapia
6828:	A.....T.....C..C	striped_bass
35331:	T.....A.....C..T.....GT...T...G...C	pufferfish
44452:	TTA...A.TCATGC...T.C..TACGAAT.AA...AAT.A..C..C	zebrafish_a
79127:	ATACG..TC.A.AT..A...TT..ACC.T...	zebrafish_b
53676:	GT.GA.....C.....C...	horn_shark
90907:	G..GG.CT..T..C..T...T..ACCG...TC.G.-----C..A.	Human
86524:	G..GG.CT..T..C..T...T..ACCG..CTC.G.-----C..A.	Mouse

HoxA9a:1

35009 35019 35029 35039

35000:	GGGCTGCCCGGATCCACACG-----GCTCTGCTGCTCTCTGATT	tilapia
6878:	.C.....C.....G.....	striped_bass
35381:	.CAT...A..T..A...A-----GT.....A...	pufferfish
44502:	AC.GAATA.A.TC.G..T..T-----ATA..A.A..CTGAA.TC.	zebrafish_a
90949:	...G..A.T.....G.TTGACACTCACA..T..TCC..GA...C.	Human
86566:	...G..A.T.--.....G.TTGACACTCACA..T..TCC..GA...C.	Mouse

HoxA9a:1

	35049	35059	35069	35079	35089	
35040:	ACGCCAATGGCACCCTGGCGTCAGCATCACCGGTGGAAAAGGACGAACTC					tilapia
6918:	C..G.....CA..G..G.....AC...G					striped_bass
35421:	CA..G..C..G..T.....CGG..G					pufferfish
44542:	T..A..C..-----..G..GTT..TACCA...CA..A..C..GAA					zebrafish_a
90997:	.T..TTG...					Human
86614:	.T..TTG...-----TT..TC..T..A..T..T..GA..AA...AA					Mouse

HoxA9a:1

	35099	35100	35114	35124	
35090:	TCCGTCCAGG-----CAGGGGAT-----TTGAGCGGAGAGGGGGGA				tilapia
6968:	G.....-----C-----G.....G..A..CT..				striped_bass
35471:	..AG...CA-----..A..C-----G...TT..CACT..				pufferfish
44580:	.TAG..GAA-----T..CT..A-----AA...T..C..CATC..				zebrafish_a
79287:	C..AG..G..A..GCGCCTTCT..C..AAA..CAATGCCGA..AT..AGAGC..C..G				zebrafish_b
86652:	C..AG..G..A..GCGCCTTCT..C..AAA..CAATGCCGA..AT..AGAGC..C..G				Mouse

HoxA9a:1

	35134	35144	35154	35164	35174	
35125:	AGAGAAACCGGGCCTAGATCCAAGTAAGTCAAAGCAGAGTCTTTTATGTC					tilapia
7003:	T.....GCT.....CG.....T					striped_bass
35503:	...A.....C.....C--...T..A..A..A..CC..T					pufferfish
44615:	G..G.....GCT.....G.....CTG..-C..A..T..G..CGG..A..A					zebrafish_a
79290:	GAC...G..TA..AT.....C.....GC..CT..AG..					zebrafish_b
86702:	...C..G..CCC..A..C.....C.....					Mouse

	35183	35193	35203	35213	
35175:	-----ATTTGCACAACATAAAGCCGTGGGGATTGGGGTGCCTTA				tilapia
7053:	TATAGCCTACT...AT..CG.....T..C..A.....G..G.				striped_bass
35551:	-----CT...AT..TCGA..C..T..-TA.....A.....				pufferfish
44664:	-----TA..G..ACA..TG..T..C..TTTA..A..TAC..TT..A..A-----				zebrafish_a

	35223	35233	35243	35253	35263	
35214:	TGGGGGTGCGCGTCCTAACAGATGCCATTCTGAACGTGCCATTTTCCTTAT					tilapia
7103:	TG					striped_bass
35587:	C.....AGT..G.....T...T...C..A..A..					pufferfish
44701:	.T..ATGT..A..-----A..TAG..G...C.					zebrafish_a

	35273	35283	35293	35303	35313	
35264:	GGGGGGCTGTTAATAGCCCAGCTCACATTGCTGTATTAGATAACCTCTTG					tilapia
7153:	...A-.....G.....C.....A.....T...					striped_bass
35637:	.A..-TC..A..GA..G..A..GTCTTG...A..A..A...TA..T..G.					pufferfish
44734:	.TAAA-----TT..GAACT..TT....AA..C---T..GA..T..G.					zebrafish_a

	35323	35333	35343	35353	35363	
35314:	CAGCCTTTAAAGTGAGCGTGAACAGCGAGGGAGGCAGAGGGGAAAAAACAA					tilapia
7202:	...T.....A.....G..CA...A..GAAA..G...AGTTGTGTT					striped_bass
35686:	.-T..T....CT..A..A..AT..G..CATTT..TGCAA..TT..CCTTT-----					pufferfish
44774:	--.AT..G...CAA..C..T..G..GATTT..TTT..CTA..CT..T..ATTT					zebrafish_a
87367:	..G..G..A.....GAAG.....A..G..G..G.					Mouse

	35373	35383	35393	35403	35413	
35364:	TGGACGGGGAGCTGTAGAGCTGTGGATATAGCAGAATTTACAGGCGCAC					tilapia
7252:	...GT.C.T.CA...GC...CA.TTTCTCTT..C...--A...G.GGGG					striped_bass
35730:	-----CGT..T....T.A..CTAT.T-----GTA.C...G.-.					pufferfish
46594:	T...G.....					horn_shark
87399:	G.A.AA.A...G..					Mouse

		35426		35439	
35414:	TCCGCTTT-----TATTTTATTTG-----CCAAATT				tilapia
7299:	.TT.T...TGTCTCTCTTTTTTTTC.T...T...GTCTGAG...G...				striped_bass
35768:	.AT.T.GA-----AT.CA.T.C..GCGTGAG.A...C.				pufferfish

	35449	35459	35469	35479	35489	
35440:	CTGAGTGATGTATTCTTATATATATATATCAATATATTGGTCAGTCA					tilapia
7349:	A.....T.G...TC-----C.....C..G					striped_bass
35801:	.C-----TC...G..T.G-----TC.....ATCC..G					pufferfish
37928:	..A...ATA.....AT.....A..					zebrafish_a
30151:	..A...ATA.....AT.....					zebrafish_b
51047:	CT.AT.....TAC.GT.....AA.					horn_shark

	35499	35509	35519		35528	
35490:	GAAGCTCAGGACCTCACACCAGTGTGCGACCCC-----ACTCTT					tilapia
7383:	.T.-.CGG.CC.....C..TTCCCCTCCCG---.....					striped_bass
35833:	.T.--C.G.AC.....C..CA.....A..T..CCTGCCCCCTA.....					pufferfish
44882:	TC.CTTA.A.TTT.GA.AC.CTCATT.CTTCCCTCTAC..T..					zebrafish_a
80074:	..TC..					zebrafish_b
54536:	..					horn_shark
92115:	...A.AC.....TT.T-----T..CC					Human
87747:	T.T.T-----C..C					Mouse

	HoxA9a:2					
	35538	35548	35558	35568	35578	
35529:	TTCAGATAAACCAGTGTCCA ^{ACTGGCTCCACGCGAGTGCCACAAGAAAAA}					tilapia
7429:	.C.....G.....					striped_bass
35881:	.C.....T.....C.....					pufferfish
44926:	CC...A...T.....T..T...CT.G..GC.T...					zebrafish_a
80079:	.G.....TTC.....G..T...AGT...T..G...					zebrafish_b
54538:	TTCCG.....G..T..A..GT.T..C.....					horn_shark
92139:	CG.....CAG.....T..T..C.CT...TC.G...					Human
87765:	CG.....G.CTG.....A..T..TC.CT...TC.G..G.					Mouse

	HoxA9a:2					
	35588	35598	35608	35618	35628	
35579:	AGCGCTGTCCGTACACCAAGCACCAGATCCTGGAGCTGGAGAAAGAGTTC					tilapia
7479:	.....					striped_bass
35931:	C.....T.....					pufferfish
44976:	.A.....T..T..T.....C.....T					zebrafish_a
80129:	...G.....T.....A.CA..C.....A...A..T					zebrafish_b
54588:	T.....A..T...CGT...A...A..G..A...					horn_shark
92189:	...G..C..C..T..A..A.....C.....A.....T					Human
87815:	...A..C..C...A..A.....CG.....A.....G.....T					Mouse

HoxA9a:2

	35638	35648	35658	35668	35678	
35629:	CTCTTTAACACCTACCTGACCAGGGACCGTAGGTACGAGGTGGCGAGGC					tilapia
7529:	T.....					striped_bass
35981:	A.....C.....T.....					pufferfish
45026:	T.A.....T.....C.GC.C.....GC.A.....A.C.CC.T..	zebrafish_a				
80179:	..G.....T.TG.....CT.TC.C.....A.T..A.....A.A..	zebrafish_b				
54638:	T.G.....T.TG.....C..A..A.....C..A.....C..C..AG.	horn_shark				
92239:	..G..C.....TG.....C.....C.....TC.A..	Human				
87865:	..G.....TG.....C..AC.....C.....CC.....	Mouse				

HoxA9a:2

	35688	35698	35708	35718	35728	
35679:	GCTAAACCTCACCAGAAAGACAGGTTAAAAATTGGTTTCAGAACCGCAGGA					tilapia
7579:	.T.....G.....C.....C.....					striped_bass
36031:	.T.....G.....A.....C.....					pufferfish
45076:	A..G.....G..G.....C.....C..A.....	zebrafish_a				
80229:	C.....T.....G.....A..C.....C..A.....T.....	zebrafish_b				
54688:	C..T.....T..T..C.G..A.....C.....TA.A.....	horn_shark				
92289:	..C.....G..G.....C..G..C.....C.....	Human				
87915:	..C.....G.....C..G..C.....C.....	Mouse				

HoxA9a:2

	35738	35748	35758	35768	35776	
35729:	TGAAGATGAAGAAGTTCAATAAAGACGGCGCACCGAAAGACGAGTGA--C					tilapia
7629:	T.....					striped_bass
36081:	T.....G.....C.....					pufferfish
45126:	A.....C..A.T.A---A...G..A..C.A.GA.					zebrafish_a
80279:	A.G.....TC---C..A.....					zebrafish_b
54738:	A..AA.....C..G..AA---T.....					horn_shark
92339:	...A.....AA.....C.....C---G.A.....					Human
87965:	...A.....AA.....C..G..C---G.A.....					Mouse

	35786	35796	35806	35816	35826	
35777:	TGAACCTTAGACAAAAGCAGCATTAGACTGATAGCGAGCTTGGTGTGTAA					tilapia
7677:	G.....T.T.CAGTA-T...G...T.....T.....G.					striped_bass
36129:	...-----T.-...GA..CCG.G..T-...AA.....G.					pufferfish
45173:	.A..G.A					zebrafish_a

	35835	35845	35855	35865	35875	
35827:	GAGCTC-TTAACTTTGCTGGACCCTGTTTTTAAACAACAATTGTCGTATTG					tilapia
7726:	A.....-.....C.....T.....TT.....T.....					striped_bass
36163:	A.....T..G...CA.....T.....G..TC...C.....C..					pufferfish

	35885	35892	35896	35906	35916	
35876:	TTCTTAATAACAG---CTAT-----AGGGTTATTTGTC TTGTAAAAAAC					tilapia
7775:	...AT.....AAG...T-----C.....T...G.A					striped_bass
36213:	...AT.....TGAG..G.TTTGGGCT.A.....T.T---					pufferfish
32308:	...A.ACCG.....C.CCC-----ACAG.T...A					zebrafish_b
56805:	.G.T.-----CA.A.C.....C.AC.A..T..T					horn_shark
50320:	G					Human
89485:	..CAC.....A					Mouse

	35926	35936	35946	35955	35965	
35917:	AAAAACAAACAAACAAAAAA	ACAGCATGTTGGGCTTT	-AGTTTTTTT	GCAA		tilapia
7820:	.....	.....	CC.....	GA...G.		striped_bass
36260:	-----T	.....	GCAGT	G.		pufferfish
32341:	A...A...A.....					zebrafish_b
56839:	T.					horn_shark
50327:	.G.....G...C.....					Human
89497:	A...A...A.....					Mouse

	35975	35985	35995	36005	36015	
35966:	CTACCTTTATATTGCACAGTTT	AACAGTG	CACCCTCGTTTTTTTTT	AACT		tilapia
7850:	A.....	C.A...C-G.....	GT.T.			striped_bass
36290:	..TT...C---.....A...GG..G.C..C.A.....	---C.....				pufferfish
45374:			..CC.....	GT.		zebrafish_a

	36032	36042	36052		
36016:	TGTTCTTTT---	GTGCTGATTTGAATTAATACCTCGTTAAAGTGTA----			tilapia
7899:	CTCA..T.....T..A.....	CT-----			striped_bass
36334:	G.....G-----	CT.CA-----	CT....GTAGC		pufferfish
45385:	T..CG---AC..A.G.....				zebrafish_a

	36065	36075	36085	36095	36103	
36059:	---TTAGTTGGCCTTGCCCC	TGTGCTTGTTTGTGTATGACTGTTTC--	TA		tilapia	
7944:	---.....G.T.....	GA.....T---			striped_bass	
36366:	CCC..TC.....C.T..AC.....	GA.....TA..			pufferfish	

	36113	36123	36133	36143	36151	
36104:	GCTCTCTGTGTTCCGGATTGTAGCTATATTTGTTGTCTGT--	CTCAGAGC			tilapia	
7989:	...G.G.....T..T.....	-----			striped_bass	
36414:	.A.G.GC.....T..T..C.....	A.ACT..CCT..			pufferfish	

	36161	36171	36181	36191	36201	
36152:	CAACTGAGCGTATAGTTTG	AAAAAAAAAAAAAGTATTTTATTGTTGTTT			tilapia	
8025:	-----	TGT.TT-----			striped_bass	
36464:	..G..C.....-C.....	CTTT.C.T-----	G.-C.A.CC		pufferfish	
60199:		.G.G....C.--.C...CC.....	T..C		horn_shark	

	36211	36221	36229	36237	36247	
36202:	CTCTCTCACTATTAGGATAAGCATT--	TGAC--TGAATTTGAGTCTAACG			tilapia	
8063:	...C..T...GC...A.C..TG.C.GA....	CA...G.....A			striped_bass	
36504:	T-----	CG....A...A..G.TTA			pufferfish	
60227:	..				horn_shark	

	36257	36267	36276	36286	
36248:	TTAGAAACTGTAGGGAAAAA	ACAGA-----GTAAATAGGCGCA			tilapia
8113:	..G.-...C.....	CTGATCGCATTT.G..G.....			striped_bass
36535:	A.G.....A.....	GC.A.A...			pufferfish

	36296	36306	36316	36326	36336	
36287:	TAAATACAAGGAACCTCCTGAGA	ACTCTTATGAAATTTCAATATATATAT			tilapia	
8159:	CCTC..A.....T...A..TG.....	A.C.T.A..TA.A.G			striped_bass	
36563:	G...CCTC.CA.....T...AC.TG.....	TGA.A.T.A..C..A.-			pufferfish	

	36346	36356	36366	36376	36386	
36337:	ATGATAGGCT	AGAAAGTTGT	ATTACATAAC	ATGATTGACT	ACCTATGTCTT	tilapia
8205:	...T..---	A.....	G...C.....			striped_bass
36608:	..A..---	-----T.....	CA.....			pufferfish

	36396	36406	36416	36426	36434	
36387:	TCAACTACCT	ACATGGACCT	TTTGT	TTTGCAGTGGT	GGGTTGTAG--TAGA	tilapia
8252:	.....	ATA....A.T....	T..A...C..A..A...--			striped_bass
36646:	.....	ATA..G.-.T..CCC.....	C.AT.G..C.CCC.T.			pufferfish

	36444	36450	36460	36470	
36435:	TTTGTTCGCATTA----	CTGGACTACGTGT	GACTGAATTT	CAGGGAGT--	tilapia
8300:	C.T.....	GATG...A.....		AA	striped_bass
36695:	C.T.T....	GATG...A.....		G.....AA	pufferfish

	36488	36494	36504	36514	36524	
36479:	CATTTTCAAAG----	AGCGCAATATTTGT	TAGTGAGTGCAAAT	GGAAGAA		tilapia
8342:	G.....	TA.AT...G.....	A.A....TA..T..			striped_bass
36737:	..AAC.G....	TAGCTA.ATG.....	C.T.A.A..T.ACC.T..			pufferfish

	36534	36544	36554	36564	36574	
36525:	AACACTGTAGGCTAGCTACT	CATTTTAA	TACCTCACGGT	CATGCTGACC		tilapia
8388:	.....	T...G--		C....		striped_bass
36787:	.....	T...T...G--	G.....	A.....		pufferfish

	36584	36594	36604	36614	36624	
36575:	GTCTGACTTTTGGTT	CACAAATGTAATTTGT	ACTTTATTTATTGAATAAA			tilapia
8430:	.....		A.....			striped_bass
36830:	...C.C.....	T.....	T.....	A.....		pufferfish

	36634	36644	36654	36664	36674	
36625:	ACAAATTATATCTGCGACTACAAGCATCTTACATT	CATATCTCACTGCAC				tilapia
8480:	.....	A.G..G...CG.....	TC...T...T.TTGG			striped_bass
36880:	.....	T.A.G.GT..GCA..G.				pufferfish

	36684	36694	36704	36714	36717	
36675:	CCTCACATCAGTCTGCATTT	CATGCTTTCATAATATTCGAA-----	AT			tilapia
8528:	.....	GAAA..A....TG.---	A.A..A.A.AA.---	TGT..		striped_bass
36912:	-----	GG.TT....TT.---	CT.A....A..A..TCGAAGT.A			pufferfish

	36727		36737	36747	36757	
36718:	CCTGAATTCT-----	TGGTACGCAAAAAACCAAA	ACTAAAACT			tilapia
8571:	GT.A.T..G.		C.T.A.....			striped_bass
36949:	TT..GT..G.ATTATTACTGC..CTTTT...C.			G...T.		pufferfish

	36767	36777	36787	36797	36807	
36758:	GTCAGCTGGCGCCGGTTT	GCGCTGCCAAAAAATATGACCCGTGAAAATAC				tilapia
8594:	-----	C.TTAT..G.....	GGT...ATT-.C..C.C..			striped_bass
36993:	-----		A..TGCT.			pufferfish

	36816	36826	36835	36845	36855	
36808:	AGACACA	-AAAAATAAGTAATAATAAT-	CAGTTATATT	TGGATGATGC	A	tilapia
8629:	.CG....CG.....C.TA..G..A...C..AAG.....AC.TG.					striped_bass
37003:	.TGGC.	-----	T.TG.....T-----			pufferfish
69227:			T...C.TT..A..AA.			horn_shark

	36863	36870	36880		
36856:	--TACTTAGT	GAAAAT---	GAGCTTTTTT	GTTTGCTCT----	AATAT--
8679:	---G.C....CC.C..CAAC.AT.....ACACAT.T.TTATA.....CA				tilapia
37021:	-----	C.ATG.A...ACGCAT.T.----	A...G.CT		striped_bass
38961:	C.---	T.AT.....ACA..G.T.-----			pufferfish
69243:	CA.C..G...T...T.---	...A.....CT....T.			zebrafish_a
					horn_shark

	36899	36909		
36894:	----TTTTA	TTTGTAAACAGCAAA-----		tilapia
8726:	AGCA.....C..C.G.GT...C.CTCTCTCACACACACGCACTCATTT			striped_bass
37049:	AGGA....C.-----	TGG.		pufferfish
38992:	-----			zebrafish_a

	36924	36928	36938	36948	36958	
36915:	AAAAAAGCAAAA-----	AAAAAAAAAAAAAGAGTGTGTAC	CCCCCCCCC			tilapia
8776:	.C.C.CA..C.CTCATTT.C.C.C.C.C.CACACACA					striped_bass
17917:				TA...A		striped_bass
37064:	.C.C.CA..C.C-----	.C.C.C.C.C.CACACACAC.	-----	A.A.A		pufferfish
33490:				.T.T.T		zebrafish_b
53260:			CCC..T..T....T			Human

	36968	36978	36988	36998	37008	
36959:	CCCACACACACACACACTAATGAAACCTAACACACCTAGAACACTGTATG					tilapia
8843:		.G...T...A.GC.....T.--GG..A..A				striped_bass
17930:	C...G.....					striped_bass
37103:	.A.....AC..-----	AC..G--GGGA.TCA				pufferfish
46567:				...G..		zebrafish_a
33496:	.A.....					zebrafish_b
33621:				G..		zebrafish_b
53279:	...G..G..G.CGC...C..					Human
50192:				.T...G..		Mouse

	37018	37032	37040	37045	
37009:	TGTGTGTGTGTGTGTGT-----	TGGGGACAGAGCTGCA--T-----	CTTG		tilapia
8875:	.C.....T.CTGGAC.....G-----				striped_bass
37141:	.CC..A.T.C...A.-----	TG.....GG-----			pufferfish
46573:	.....				zebrafish_a
46655:		.A.AG...GC...T.--.ACTGGTC...			zebrafish_a
81364:					zebrafish_b
33628:	.....				zebrafish_b
56940:		...T..T..G.AG.-----			horn_shark
50200:	.....				Mouse
50223:		..A..G..A----.A.-----			Mouse

	37055	37063	37073	37083	
37046:	CAGAGGATGTTGTTAGC-----	TGTATACAGCCATAAAAGACA			tilapia
8918:	.....	.....	.....	.....	striped_bass
37179:	..T..A...C....G.....	.....	C.....	.....	pufferfish
46681:	...T..G.....	-----C.C..C.....	.....	.....	zebrafish_a
81365:	..AGC...A..AG.G.....	-----C..G--G..A.....	C...	.....	zebrafish_b
56959:	...T..C...C.....TAAATTCAGAGTG..G...C..A.....	A.....	A.....	.....	horn_shark
94191:	.....	.....	A.....	.....	Human
89809:	.....	.....	A.....	.....	Mouse

	37093	37103	37113	37123	37133	
37084:	ATTACCGCTATAACCTTTTATGGGGTGCAAAGCGCTGCGAGGCCGAGAGGA					tilapia
8956:	.....	.....	.....	.....	.....	striped_bass
37217:	C.....	.....	.....	.....	.....	pufferfish
46719:	T.....G.....T.....	.....	.....	.....	AA..	zebrafish_a
81401:	..C..A.TCT...TG.....A.....T.TGAG...GA..					zebrafish_b
57009:	..G..T...G...G.G.....T...A.....TT.AG..G					horn_shark
94204:	..G.GG...G.T...G.....T...G...A.....G.C.G..					Human
89822:	..G.GG...G.T...C.....T...G.....TA.G.G..					Mouse

	37143	37152	37162	37172	37181	
37134:	CACAAAACAAAAA-GACACCGTGGGCTTCGACTGCAGAAAGCCCA-AAAT					tilapia
9006:	A...T..A.....A..T.....					striped_bass
37267:	A...T..A.AA.GA...A..T...T.....					pufferfish
46769:	.G...C...C.G.---T.TTA..A.AG.....A..T.GG...AGTG..C					zebrafish_a
57058:	.GA.GTG..T...					horn_shark

	37191	37201	37211	37221	37231	
37182:	AATACAGCCGATGTGTTTCTCCTCAGCTCAGATATGACAAGGCCGCTTAG					tilapia
9055:	...GT.A....C.....GT.....GG.....C..					striped_bass
37316:	...GTG.....GG.TA.....T..C..CTA.A..CCG..					pufferfish
46816:	...G..C.ACG....					zebrafish_a

	37238	37248	37257	37267	37277	
37232:	GCTAA---TCTGTCATGAGC-CATCACAGACAGCGCCAAACAATTTACAA					tilapia
9105:	C....AGC..C.....T..G.C...TGTC..CA--T..C.....					striped_bass
37366:	A....-GC....C.-----AT...TGTT.....-T...C.T...					pufferfish

	37285	37295	
37278:	GAAGAGG-----AAAAAAACCCCGCATTTT--		tilapia
9153:	C....ATTTTGTAACATAATTTGTAAT.T.T.....GG		striped_bass
36864:	--		pufferfish

	37312	37322	37332	37342	37352	
37304:	-TTTAAATGTATTTTGGAAATTTAGGAATTTGTTTAAACACACACAG					tilapia
9199:	A...					striped_bass
19262:	TA					striped_bass
37405:	G..A					pufferfish
36870:	-.....C.					pufferfish
39195:	...A.A.AT.T..A..TAT..A.A.A..C.....TA					zebrafish_a
84879:	C..T.C.C.....A					zebrafish_b
34031:	..A...A.A.AT.T..A..TAT					zebrafish_b
61652:	C.C.CAA.GGAG....GC.....A					Mouse

	37362	37372	37382	37392	37402	
37353:	CACACACAC	ATTTTGAGTTCAA	ACTGTCCA	ACTGGCTTTGG	GAGTAATAGT	tilapia
19276:	A.....	GAGAGA.AC...	G..AA...C.A.	ATCGA.AG....		striped_bass
37409:	G.TG.....	-----	..T..ATT..C.	TCG.G		pufferfish
39235:	.....					zebrafish_a
84900:	T.....					zebrafish_b
61686:	.....					Mouse

	37412	37421	37431	37441	37451	
37403:	GTAGTTCTAGTT	-TAAAATATGGCC	CTTCATTTT	AGTGTTAAG	ACTGGT	tilapia
9253:	.TC.....	G.....T..G.G.	-----	C.....		striped_bass
37437:	AC.TCCT.---	-----	..T..C.....	C.....		pufferfish

	37461	37465	37475	37485	
37452:	TCAAGTCTCTGCA	-----TGCTGG	AGAAAATATTTGGC	ACAAAAA----	tilapia
9289:	-----	T.....G....G.	CAGA		striped_bass
37463:	-.G....AAC.	GGCGGTGT..T..AT.G.	C.....T.	CACT	pufferfish

	37500	37509	37519	37523	37533	
37492:	AGAGAC-CAGC	-AAATCCGATCTG	AGCTAT-----	AGTTGCACAGT	GTCTC	tilapia
9331:	.A.T..G....G.	TA..G..T....	GTGCAA..C...T--	....		striped_bass
37512:	.A.T.AAG...G..G	-----G.GGTGCAG	..C..AT--.A..			pufferfish

	37541	37551	37566	
37534:	--CTGATCGATCAA	AGACAGGAGGAG-----	CAGGTAATT	tilapia
9379:	AGA..GCGA....	GG.C.T..GACG.TTCTGCC	ACACACCC...C.C...	striped_bass
37548:	--T..G-G.....	TG.C...ACACG.GTCTGTT	ACAAAATT...CC.CG	pufferfish

	37576	37586	37596	37605	37615	
37567:	CAGCTTTTCATTA	AGGGTCTGTACAGAA	ACT-ATCGATTATGCTG	CTTGGA		tilapia
9429:	T..G.C.....	C.....GG..AC.	TG.AG..A..			striped_bass
37595:	T.AG...G.C.T.AA.	C.G.....AGC..AC..G.	AAG.AGA.A..			pufferfish

	37625	37635	37645	37655	
37616:	GGCTAAGTCGGACTTT	AGTCCACAACCGGAGTGC	TGTTGTGACGC-----		tilapia
9478:	A.G.....	T....C.....			striped_bass
37644:	AAG.G.....	---G.T.....			pufferfish
57227:			CCTCT		horn_shark

	37670	37680	37690	37700	37708	
37661:	GTTGGGGGGGAAG	CAGATGGACCCAA	ACTTCAAAGACTCGG	CCA--GAGA		tilapia
9521:	...A.....	C.....A.....	G...A...--			striped_bass
37687:	...A..A.--CC.	T.....				pufferfish
47009:	G..C....	TTTG.....G.CTCA..	CA....			zebrafish_a
57243:	TT.....		AAA.TG--.GAG			horn_shark
94497:			A.A..AGT-A..			Human
90095:			CT.AT..AGT-A..G			Mouse

	37718	37727	37737	37747	37757	
37709:	CAGTGAATAAAA-CGCCTGGTCTGCTATACTGTCTGGCATTCCAGTTTT					tilapia
9567:	.....					striped_bass
37731:	...C.....A.....G..G.....A					pufferfish
47048:	A.AG...--G..T-..AGACA.G..A..GACAT.....GC...C					zebrafish_a
57280:	ACT.....-T.AAG.....GC.AG.C.....T...AG.....					horn_shark
94521:	GT...C....G--..G.....G.-.....A...GTCCC..					Human
90118:	GT...C....G--GAA.....G.-.....A...GGC.C..					Mouse

	37767	37777	37787	
37758:	AATGGCTTTATGGCCGTCCAGACACAATTAGGCCGCTTC-CAGA-----			tilapia
9616:	T.....			striped_bass
37781:	...T.....C..T.....			pufferfish
47095:	...T.....T.....G.....T...T..T-----			zebrafish_a
57329:	...AG...CAA.T.....CT....C..TATTT.....			horn_shark
94568:	...AG...CAA.T.....C.C.....			Human
64894:	T.....CCTGCAG			Human
90164:	...AG...CAA.T.....CTC.....GTATCC.A.CA-----			Mouse

	37806	37818	37827	
37801:	----ATGGCACCATT-----TGTTTTTTCT-TCTCTTTCTGT----			tilapia
9659:	-----			striped_bass
37824:	-----C-----			pufferfish
47138:	-GGTCC.T.....TGGAGAGG.....C...-..AGCCA.CC.----			zebrafish_a
57372:	--GA.G.CG.T.....G.....			horn_shark
64911:	GGTTGG..AG..TG.....TC.....C.....			Human
90208:	----.ACC.TTT.....GC...G...GCC..C.ATAAA			Mouse

	37843	37848	37858	37868	37877	
37834:	GAGACTGCGGTCTG-----GACAAAAGGCCGAGCGGAAATGATC-AGTT					tilapia
9692:	C.....G-.....C.					striped_bass
37857:	...AA..C.....					pufferfish
47182:	-----TT..A-----T.....A.AG--.....T..A...T....					zebrafish_a
57396:	-----..T.C..A-----GT.-T.....A.CG-.CC.					horn_shark
94637:	T....CCGCC..T...GC.G.--T.....C-.C.-TC..					Human
90246:	.....					Mouse

	37887	37896	37906	37916	37926	
37878:	TTATTGGATTTC-TCCTCGACGGGGACGCGCAGGACTCACGGTCATTTGGA					tilapia
9735:	C.-..C.....A.....					striped_bass
37900:	C.....T.....GT.....T.					pufferfish
47220:	.A....CCC.-..					zebrafish_a
57434:	A.TC..G..T.TA.T.T..G.					horn_shark
94675:	CA.T-G....					Human

	37936	37946	37956	37966	37976	
37927:	GGGATCCTTTGTTTCTACCTGGGAACCTTCCGCCCTTGCTCCTTTGCCG					tilapia
9784:	.C.....TC.....T.					striped_bass
37947:	TA..G.....TC.....TT					pufferfish

	37985	37995	38005	38015	38025	
37977:	GGCCT-TCCTAAAGGAAAAGGCAGCAATAAAGTGAACAGCTAGTTTCAGA					tilapia
9834:	T...CG.....G.....CC.G.....A.					striped_bass
37997:	A...AG.....C.....A-.....CC.....A.AT.A.					pufferfish

	38035		38047		38053	
38026:	CACAGCAGT	GAGACT-----	TGTGTCTGT-----	AAAC		tilapia
9883:	TG.CAG.C..	ATAGATGG.....	T...TTTTGTTTTTTTCA...	T		striped_bass
38046:	A....TG..AG.C..	GAAGCCTA...A...-	-----	A		pufferfish

	38065		38073		38083		38093	
38054:	ACG-----	AGTATGTTGCA--	ACACTGGAGCTTTTCT	C	CAAATCAT	A		tilapia
9933:	..ATCTGGACAG..	C....AA.AG...TCA.CA....	G..TG....GC.					striped_bass
38081:	G.A-----	AGC..C-----	TGT..AC.G.A.GTAT..	G.C...	G			pufferfish

	38103		38113		38121		38131		38141	
38094:	CCCAACATAA	ACGAAACGTCACC--	TCAGTGACATCCTCCTTT	CCTTAAT						tilapia
9983:	AT.C.-.G.....	T.....T...TT.G..C.C...	TTCT..AA.T..T.G							striped_bass
38117:	TT.---.CTG.TTG.A	AT.T.--AGGACA.G..TT..TAA.GT...	T.							pufferfish

	38151		38161		38170		38177	
38142:	CTGCTGCATTCTAT	CGGATT--CGACATTA	AAAATAA-----	CA				tilapia
10032:	...G.ATT..A.CCG.C...	G.AG..GG..G.C.-----						striped_bass
38162:	..TT.TTG..T.C.TAA.AC-AA...	GG....A.GACCAAAGCA	AAAAA..					pufferfish

	38187		38197		38202		38212		38222	
38178:	ACGTCTGCGCAGT	GCTGCCTCC----	CCAACGCTGCAATCCCC	C	GAAT					tilapia
10068:	...C.....C.....	-----C.....G....	TG.ATG.							striped_bass
38211:	.AACAAAAA..CA...	A.G.G.AGATA.....								pufferfish
65036:	.T.AC....TT....	-----G..TA..CC...T..TA...								Human

	38232		38242		38252		38262		38272	
38223:	CACCAGAGGGTGG	CGACACTGTTCCACATC	ACCCCTTTGCTTTTT	GTAAC						tilapia
10112:	-.....	T....A..T.AACCCA.CGC..	T....							striped_bass
38245:	GG...T.....	T.C.....G.G.T-----	TCAA..TATG.							pufferfish
65073:	T.T.									Human

	38282		38292		38301		38309		38319	
38273:	ACCCCCTCCC	TAAATGAGCCTGCACTGGG-	AACAACT--AGCAACATTTT							tilapia
10161:	..T..-.....	A.....G.....G.....	GT..T.....							striped_bass
38289:	..TTT-.TA....	C.....C..A....G..A.C.ACAGTAT.....								pufferfish

	38329		38339		38349		38358		38368	
38320:	AAGAGTCCAGAG	AAATAATTTACACCTTTTT	ACAGTCTCAGTGCAGAA							tilapia
10210:	CA.....									striped_bass
38338:	CA....	T.....A...A....C.....	TGT							pufferfish

	38378		38388		38398		38408		38418	
38369:	GCTGCTTCATGA	ACCTGCAGCTCTGCGGGG	AGGAATGAAACAGCCTGCAC							tilapia
10259:	TCC.G.....	G...T..T..C..A.G.....	G.A.T-							striped_bass
38388:	T.C.									pufferfish

	38428		38438		38448		38467	
38419:	ACACTGTGGCTG	CTGGATTACTTCTTGCA	CACCCAAGTA-GTCGCTCTGT					tilapia
10308:	T.T.A...AT.....	G.....G...T...C.T..GAC.T.G.T.....						striped_bass

38468:	TCA-CTCTTGTCTGTC-----TGTTGTCGTA----TTTA--AAGGTAAAC	tilapia
10358:	...GAAT.....C.T.TAGGA....T.TA..TGAC....TCG.T.C...T	striped_bass
38506:	GCTTTAAA-----TTAAATAATTAGTTTAAACAGCAAGACTTTTGCTAAAAT	tilapia
10408:	.A.....CATTCT..TG...GCAG.G....TT...G..A.CA.G....	striped_bass
38551:	CGGCATCCTCTGCCCCAATTGTTTATT-AATTATTTCAAGGATGTATATG	tilapia
10455:	-----A..AA..G..T...C...-T.GCA..T.T.A.....G..T	striped_bass
47517:	...C.G..C.T....G..T.CAC....C...	zebrafish_a
38600:	TTTAAAT-ATGATA-TAATATGTGATTTTTTCTACACGGAATATTTAA	tilapia
10494:	A.GT.G..TT.A..GT...CC...T.C...CC.....A..G.C.	striped_bass
47548:	A..A...	zebrafish_a
38648:	GTTTACAA-----	tilapia
10540:	A.AGG...ACACAATCGGCGGATAGAGCTGCACAAATATAATCAATCGTT	striped_bass
38656:	-TCCATATT-----AT-----TATTATTATTATT	tilapia
10590:	T.....CACAAATAATTTAACGA..TAGGGGTG....GA.GA...C.	striped_bass
38680:	TTATTATTATTATTATTATGCTTAAACATTATTAATAAATAACAAACT	tilapia
10640:	..T...AA...C.....AAT.CTC..T.....CTT.T..T..TT.T.	striped_bass
38730:	CTTACCTTAAATAATATTAGTTAATAATTAGATAATAATATTAGTAAAG	tilapia
10690:	A.....G..GT....TA..GTC.-----	striped_bass
38780:	CTACTACTACTAATACTACTGATAATTATTATAGACGGTAATCGTAATT	tilapia
10715:	T..T..T.TT..G..T..T.AG....A..A.....A....A.	striped_bass
38830:	TTTAAGGTAAAGTAG-----TGATATCTAAATATTTTCAATTTAATAT-	tilapia
10761:	CCTACA.A.AT..CG.CC...CG.T..G.TT...C	striped_bass
38873:	---TAGTAATAATTTTACAAGCATGA-----TTTGTGGTAATTTATTGTC	tilapia
10802:	GTA.T...T.--....GTCG....CTATCT..AA..C.....	striped_bass
38915:	CATTTCTAGGTAACAATATAATCTAATTTTACCACCACCATCACCACCAC	tilapia
10847:	-----T.G.....	striped_bass

38974	38984	38994	39004	39014	
38965:	CACCACCAACAACAACAACAACAACAACAATAATAACAATAATAATA	tilapia			
10863:	-----G..GT..A....TGTGGG.GG.TG...T..G.G.TGGT.G	striped_bass			
39024	39034	39044	39054		
39015:	ATAATAATAATAATAATAATAATAATAATAATAATAATTTGTGAAG-	tilapia			
10905:	T..T..T..-----A.C...A..A.C...A..A..C.AT.A...G	striped_bass			
39070	39080	39086			
39064:	-----CACTTGCTAACCGGTCA-----TATTAC	tilapia			
10950:	CATTTTATTTATCTT.C...C..ATTC...CCTCATAAATCCAT.G...	striped_bass			
39096	39106	39116	39126	39136	
39087:	ACGGATAGACAAATGTAATGAAAAGTACTAGTCAAATATGTTTTAATG	tilapia			
11000:	.AATC.GTGTG...TC...AC.CGTG..T..T.T.TC..G.TA.A..T..	striped_bass			
39146	39156	39166	39176	39183	
39137:	GCACGAGCCATTTTGTAAAGACCAAAAGAAAATATACAGATGTT---TTTA	tilapia			
11050:	TT.T.T.T.T.T..G.T.T.TGA..CT...CCG...GT.AG.A..GAG...T	striped_bass			
39193	39200	39210	39220	39230	
39184:	TGTGGCAGATAA---GAAACTATTTTTATAAATATACTATAGTTTTAGAA	tilapia			
11100:	AAA.CA.....ACTA...AT...C.G.TGGA...T.T.TT.....TG	striped_bass			
39240	39249	39259	39261	39271	
39231:	ATATTTCTATAAGTACT-CTAGATAGATA-----GATAGATAGATA	tilapia			
11150:	..G-----TCG..G.T...T..AT..TTATCTATTG....CTAT..	striped_bass			
39286	39296	39306	39316		
39272:	GATAG-----ATAGATAGATAGATAGATAGATAGATAGATAGATAG	tilapia			
11195:	TTG..TGAATG.....TATC.TTATA.CCT....GCCT....G.----A	striped_bass			
39325	39335	39345	39355	39365	
39317:	ATAGATT-CACTGAGGTACTTGAAATGAAAAAGAAAGCAGAAAGCTTATA	tilapia			
11242:	.G.C...C...GA.CA..TA.TC...TT....A..C-----A...C..	striped_bass			
39375	39384	39393	39403		
39366:	AAACGATGATT-----AGTGATGATATGAG-GAAACAAACCCAT	tilapia			
11288:	G.TA..GT...ATTTGTAAAGC...AG.A.A..A..T..T.T...A.AG.	striped_bass			
39413	39423	39433	39443		
39404:	GAGAATTAAATTCAGACAGTTACCCTAGGCTTATCGGGACCGTGTGAAT-	tilapia			
11338:	..-CT.....TC.TA.A....TCTC.A.C..T....TT..C...G.	striped_bass			
39387:	..TG.A	zebrafish_a			

	39461	39471	39481	39491	39501	
39453:	TTCTTGC	-ATGTGTGTTTAT	ATCTGTGTGCGT	TTTATGTGTCTGAAGTG		tilapia
11424:						striped_bass
21831:	...G..T-G.....	G.G.G.G.....	T....G.G.....	G..		striped_bass
39085:		GC-.C.TC.T.....	A...G..G.A..			pufferfish
39393:	.ATA..TA.....	GCG.G.G.....	T....G.G.....	G..G.		zebrafish_a
34496:	..T-G.....	G.G.G.G.....	T....G.....	G..		zebrafish_b
68633:	..T-G.....	G.T.G.G.....	T....G.G.....	GG...		Human
62751:	..T-G.....	G.G.G.G.....	T....G.G.....	A.C...CA		Mouse

	39511	39521	39531	39541	39549	
39502:	TTAATCCCACTCCGCAGTCC	TGTGCCATAATAAAACCCAC	GTCTG--TGC			tilapia
11429:	T.....	C.....G..TA..T.....	CT...			striped_bass
39125:	A.....T.A.....	C.....AG...T....A...CCCC..				pufferfish
62796:	.CC.C.					Mouse

	39559	39569	39578	39592	
39550:	TGATTGGACGAGAGCGACCAGGCCGG	-GGT	CACATG-----	GGTGAGTT	tilapia
11479:	T.....	G.....C.-A.....	G.-----		striped_bass
39175:	TG.....	TT-A.....		C	pufferfish
48744:				C..	zebrafish_a
62181:	G..T.A--..T.GTC.-.....	G..AATAGAAA.A...C			horn_shark
99277:	-GAG...GT..T.TG..C.....	G.--CTGC..C...C			Human
94684:	-GAG...GT..T.TG..C.....	G.--CCGC..C...C			Mouse

	39602	39609	39618	39628	39637	
39593:	CTTTGGTCCAGAGT---	AAAAATGGG-GTTTGGTGTAAATCTAGGG-TGT				tilapia
11522:	.....					striped_bass
39218:	T.C.---	C..A.-			C-	pufferfish
48751:	.ACG..C...AT.CCAGTG..G....	-A...AA.A.G..CTCTA.C-.A.				zebrafish_a
62223:	----.A.TGA.---	G.....T.....GG.....				horn_shark
99323:	.C---.....A.A---G.....				G..G...	Human
94730:	.C---.....A.A---G.....				G..G...	Mouse

	39647	39657	39667	39677	39687	
39638:	ATTGCTGTCACTCTATCACACTACCTCGTAAAAACGACACTGAGGATTCTG					tilapia
11567:	A.....					striped_bass
39263:	...A.....A.....AG.....	A.....				pufferfish
48799:	.AC.GGA.--.G.....T..G.....	---TCA..T..TC.				zebrafish_a
62264:	.A...C..A.....G..T.....	C.....A..GC..T				horn_shark
99365:	.A..T.A...A.....T.....	C.....AAGC.GCC				Human
94772:	.A..T.A...A.....G.....	C.....AAGC.GCC				Mouse

	39697	39707	39713	39723	39730	
39688:	GGCCAACAAATCAGAGAGAAAAA----	AT	ATGAGTTCTT----	ATTATGT		tilapia
11617:	.....					striped_bass
39312:	C.....				A....	pufferfish
48844:	.CT.....C...CA...CG..GAAGT..	A...GA----				zebrafish_a
62314:	CCA--.C.....T		G.CGT.....			horn_shark
99415:	..A.....C.-.TC.....T		CGT.....			Human
94822:	..A.....C.-.TC.....T		CGT.....			Mouse

HoxA7a:1
→

HoxA7a:1

39740 39750 39760 39779

39731: GGATGGTCTTCTTAGCAAATCTACGACGGGCAGTTCCCT-GTTCCCAAAC tilapia
 11659: ...C.....A...G...T....A..-C..T.... striped_bass
 39354:C....T.....A...T..T.C.T.G.TG..GC..T..... pufferfish
 62359: .A...C...T..CC....A...G...G.CA...G.-T...AG... horn_shark
 99460: .A.C.CG...T.....A...G...GGC...T..-....A...T Human
 94867: .A.C.CG...T.....A...G...GGC...T..-C....A...T Mouse

HoxA7a:1

39787 39797 39807 39811

39780: GTG-----GAACGAGCTTCTTGCGGCATCGGACCC-----CG tilapia
 11708: ...G..G..G.....A.T..T.....A. striped_bass
 39404: .CA-----G..GT.A.....A.G.....AA pufferfish
 62408: .C.AGTGGCTTTACA...GC.A.....C.T.T.CTA..AACTCA.A horn_shark
 99509: .CC-----G.CGA.....TC.T.T.CT..AACTCA.A Human
 94916: .CC-----G.CGA.....TC.T.T.C...AACTCG.A Mouse

HoxA7a:1

39821 39831 39841 39851 39861

39812: TGGGGACGACCATAGCTCTACTCGGACTGCTGCGGCCATTGCATTGCGC tilapia
 11740: ...A..G...T..G...GG.....A.....C..G....A. striped_bass
 39436: C....G...T..G...AG...AGT...CT...GA...G----- pufferfish
 62458: AA.ATC.AG.T..G.....A..G.GC...GC..C..CC.AG horn_shark
 99547: GA.AAG..G.T.CG.....G..G.GC...GGC..C..C..CT Human
 94954: GA.AAG..G.T.CG.....GC.G.GC...GGC..C..C..CT Mouse

HoxA7a:1

39871 39881 39891 39901 39911

39862: CATCCCTCTCTGGAGTTTACAGCGTTAATAATACAGTGTACCAGAGCCAT tilapia
 11790: .G....G.....C.G.G..G.....GC striped_bass
 39480: ---.TT.G.G...GC..C.T.A.A.C....CG.....C...GA pufferfish
 62496: .CC.GA.GG.C..GC.G...AT....C.G.G..A.C..T..CG...C. horn_shark
 99585: .GA..G.TC.G..CT.A...AT..C..C.GCC.CC.T..T.....CC Human
 94992: .CA.TG.GC.G..CT.A...AT..C..C.GCC.CC.C..T.....CC Mouse

HoxA7a:1

39920 39930 39940 39950 39957

39912: AC-TGTGTTTACCTGCGGCTATGGCCAGGGGCAGGGCGCACA---CACGT tilapia
 11840: C.-C.....CG.....A...G....AC striped_bass
 39527: ..ACT.C.....CCGA...T....T-----CTC....G.ACG pufferfish
 62546: ..-CA...AC.A.ACA..T...AAT.TAAATTCA.ATT.CT....ACC horn_shark
 99635: -----G.G.C.....C...T...CGCC.A...CT.CGG..ACC Human
 95042: -----CG.G.C.....T...AGCC.A...CT....ACC Mouse

HoxA7a:1
→

	39967	39977	39987	39991	
39958:	CACACTGCAGCCCCTTTGACCAGAGCCGCCT-----GTTTCAGCGAC---				tilapia
11886:	TG.....T...C.....C.....				striped_bass
39565:	.G...A.T.A..TT.C.....GC.T.....T.....				pufferfish
62592:	TG.G...TCTG.C..A.....ATATT.CAGTTCTT.G.....TTTG				horn_shark
99678:	TG.C...GC.T.C.AC.....A.A.AT..CCGGGCTC.G...T...CTC				Human
95082:	TG.C...GC.T.C.AC.....A.A.AT..CCGGGCTC.G...T...CTC				Mouse

HoxA7a:1
→

	39999	40009	40019	
39999:	-----AGCTGCTGTCACCCTGGGACCGAACCC-----CTC-AC-			tilapia
11927:	-----C..T..G.A.C.G.G.....			striped_bass
39603:	-----GT.GCA.C.A.G.....ATA..			pufferfish
62642:	AGCAAACAGG.T...-----GAAAA.TT.G.T.A-----GA.AA-.G			horn_shark
99728:	GCCAA-----GC.....C...AAG..GGACGAGGG.G.-G.-			Human
95132:	GCCAA-----GC.....C...AAGG.GGACGAGGG.GT-G.-			Mouse

HoxA7a:1
→

	40040	40050	40056	40066	40076	
40031:	CTCGTCGCCGGACAAACAACA----CCGGATGTACCCCTGGATGCGAGCA					tilapia
11959:	...AC.....T.....T.....A....G					striped_bass
39636:	...C.A...C...AG.AC----AC..C.....A..A....					pufferfish
62679:	TG.AC.CT.AAG..G.G.G..ATTT.....T.....A.GAAT					horn_shark
99765:	TG.A.G..GC.G.TG.GGC..ATTT...C..C.....GT.T					Human
95169:	T..ACG...C.G.CG.AGC..GTTT...C..C.....CAGT					Mouse

HoxA7a:1
→

	40086	40090	
40077:	TCAGGTATGTG-----CTG-----TTTC-----		tilapia
12005:	ATATTGTCTCTTATGTGCTA.....		striped_bass
39682:	.G.....		pufferfish
62729:	G.....G.ACATAAA.....AA.		horn_shark
99815:	G.C.....A.....CG.TAGGCG		Human
95219:	G.CT-----A.....GGTCGGCGG		Mouse

40095:	-----AAAGC-----		tilapia
12043:	-----		striped_bass
39700:	-----TTCTGTGGTGTTATTTA.CCA.		pufferfish
62753:	-----T.....		horn_shark
99839:	GGCCAG---GCTGGCGGAGCGGGACCGGGAGCGGGG...GCAGCGCTGGG		Human
95243:	GGTCGGCGAGCGGGAGGAGCGGAGGGGCGGGAGC.GG..		Mouse

	40107	40117	
40100:	-----CCC-----CGGGTCAGTGCTCTT		tilapia
12048:	-----T.....GA....T..		striped_bass
39722:	-----T.....GC....T..		pufferfish
62758:	-----TATGAGAA--A..T.CA.A..AC.AG		horn_shark
99886:	GAGCGCGGAGCGCGGGGCGCGGGG..GGAAGA--G...AG.CAG...G..		Human
95282:	--GCGGGGGGCTGAGAGAGCCCAG...GGCGGCTT.CA.C.G.C.GC.CC		Mouse

	40122	40132	40142	40152	
40118:	ACAA-----	AACATTGTGATACTTAGACTGGCCGTTAGTG			tilapia
12067:	.....	G.....	C.T.....	C.	striped_bass
39735:	T-----	AG.....	C..CA.T.....	C.A	pufferfish
62782:	TT..AATGAGTGCCAGTAC.T.C.G.A.G..G.....			G.	horn_shark
99934:	G.G.-----	GCCGGT--	G.CCC....	CT.CCG.CGCA...T..CTG.	Human
95330:	G.....	GT.CCC...	GCG.....	T..CTG.	Mouse

	40162	40169	40175	40185	
40153:	GTTCAATTAAT-----	TTCGTGAA-G---	CCATTGGTGTTC	GC	tilapia
12102:	.....	C.....	G...C....		striped_bass
39768:	.....	T.C.....	C..AC....		pufferfish
62821:	T..T...G.TAGCTGAGGAACAGT.C.TCA..C.---		ATG...A..	T	horn_shark
99975:	T..T...GGAGCGGAGGCGCCAT.G....G.---		CA.A.CA..	T	Human
95358:	T..T...GAGCTGAGGCGCCATAG....G.-.		AGA..CG.A.CA..	T	Mouse

	40202	40211	40221	40231	
40186:	ATGGAAA---GAATCGTAAACCTTTT-ATTGCGCAACTAATGAGTTCTGC				tilapia
12135:	.....				striped_bass
39801:	G.....	A.....		T..	pufferfish
62868:	...T.G.TAGC...A.....		A...T...C...A.AAT		horn_shark
100021:	...T...TGA.GC..A.....	T..G..C...T...G...GAT			Human
95407:	...T...TGA.GC..A.....	T..G..C...T...G...GAT			Mouse

	40241	40251	40261	40271	
40232:	AGCCATAAAATTCATTTGGCCAGCGCTTGTGTGTGTT-----			CAGT	tilapia
12181:	.....	CC.....			striped_bass
39848:	.....	T.....	T.CC.....	C.	pufferfish
62917:	CCT.G...AG..C.C.A.TTC...CC.T.AAAG.-----			T.AC	horn_shark
100071:	CCT.G.....T...AA.T----	CCA.T...C..			Human
95457:	CCT.G.....T...AA.T----	CCA.T..CC..GGAATTTTTA..A.			Mouse

	40280				
40272:	A-----	CGCAGAGACCTTG-----			tilapia
12221:	.....				striped_bass
39887:	G-----	G.T.....			pufferfish
62957:	.....	GCAACT.A..T.TTG...			horn_shark
100102:	.....	GA.TT..A			Human
95502:	.AGTTTCTCCGCTATTCTCATT.T..T.TT.TC.CTCTTTCTCCCCCCCC				Mouse

	40290	40300	40316		
40286:	-----CCGCTGGGGGTTTTCTCTGCAC-----		TC-CTATTAC		tilapia
12235:	.....				striped_bass
39901:	.....	G.....	G.....	T.....	pufferfish
62977:	TTTAC..A..-----	A..AA..CAAATAAGAACAT.T-..T...			horn_shark
100111:	-----A.AT.AA.-----	G.TC..TA-----		T..G.CT.	Human
95552:	TCTCC..CT.-----	C...C..T.C.-----		T..T..T.	Mouse

	40329	40339	40349		
40317:	TCTTAC-----	AGCCTCTTCTCCCTTTTGTGGTTGTAA-----			tilapia
12266:	.....	C.....			striped_bass
39931:	...G.....	T...ATT..C.....			pufferfish
63020:	.GA..GCGGGAA.A..GGA.A.T..T.GA..AAA...GAATGATATAT				horn_shark
100139:	...T.....	C.T...C...CACCC.CC			Human
95583:	...CC.TCAGTCTTT.T.TC.A....C.CT.TTC...CC-----				Mouse

	40358		
40350:	-----AAAAGACCGGC-----		tilapia
12299:	-----		striped_bass
39964:	-----AAAG.....G-----		pufferfish
63070:	TCCAGGTCCAA..T..GTTTA..AGATAAAGCAAGGTCATGGAGTTGAAGA		horn_shark
100165:	-----TC-----		Human
95623:	-----T.TAT-----		Mouse

	40368	40377	40388	40392	
40361:	--CTGTTGTGTAA-ATCAGCTC-----TCCTGCACTCT-----GC				tilapia
12310:	-----T-----T-----A.				striped_bass
39979:	--A.....T.....A...T-----				pufferfish
63120:	TT..T..T..TT-T...C...GAGAAAGATCT...GG.C..TATAAA..				horn_shark
100169:	-----T..TT..T-----CT..CTCTC-----CA				Human
95628:	---C..TCT.G.CTC.....TCT..C.C...C-----TT				Mouse

	40402		40412	
40393:	AGCTCCTTTCTA-----ATTGGT-TC			tilapia
12342:	-----G-			striped_bass
40011:	.A..T.....G-C.			pufferfish
63169:	TT.C.T...G..GATGCAGGTTGGTATATAAAACGCACCAC.....T			horn_shark
100192:	TTT.....G..G-----CC..ACA.T			Human
95662:	CC..T.....GG-----CC...C-.T			Mouse

	40422		40441	
40413:	TGCATTGCAGAGGCTCTGG-TATTTTCAGAA-----AC-----			tilapia
12362:	C-----T-----TCGTTTC			striped_bass
40031:	CGT.....GG.AA-.....TCA..CTGGTCTTTGC..-----			pufferfish
63218:	.AT.G.A...GA....AACC..CAGAGAGG-----T-----			horn_shark
100213:	.CTT.CT..A.A...AG.A-----G-----G.			Human
95682:	.CTT.CT..A...AAG.A-----G-----T-----			Mouse

	40454	40464	40474	
40445:	-----CTGGATCAATATGCGCCACTACTGGCCGCTACACGGGG--			tilapia
12400:	GCACACATTG.....AG..G..T..T.TAT...TAAA--			striped_bass
40074:	-----A.....AT..T.GCGT.TTATAT.CT.TAAAC--			pufferfish
63251:	-----GGTTT..CTT..TGGCGT.A.AAT..-----			horn_shark
100236:	-----AA.CC.TCC.G.GC.TCTC..CC.A.C..GTG.CA..GT			Human
95705:	-----TGA..C.TCCGG.AT..CTC...CAT.A..GT..CA.AGG			Mouse

	40492	40501	40511	
40483:	-----AAGTCAGATGAAAATGAA-ACATAGAGGTT			tilapia
12448:	-----AGG.G.TT.AG.-.T.C.AGCA..			striped_bass
40112:	-----GC..T.G..GAC.-.-.G...ACC			pufferfish
63281:	-----CA..C.....AAC.T...GC.A.C.			horn_shark
100276:	CCATTTCAAGATGGGGGCG-.G.GA.TGA.G.C.GAGG-GTCGG.GT.CC			Human
95745:	CCATTTCCAGAACGGGGGCTG...C..ATG.G.C.GAGG-GTGGGA.A..C			Mouse

	40521	40527	40537	40547	
40512:	TTGTAATATTT-----TTTGAAGTGGGAGGTGTGGGGCTGT				tilapia
12477:	.A.A..C...GGTATTTGTTATCAT.....AGA.A.T...CTAAT.AC				striped_bass
40140:	.C...T..G..CGA-----G.TT.AA..AGT....CT.AAA.				pufferfish
63311:	.AAG-----A..				horn_shark
100324:	C.AGG.AGG.CC-----GG.G.TGA..GCTCAG.CT...G				Human
95794:	ACAGG.AGG.CT-----G..G.TG...CT...A				Mouse

	40557	40567	40573	40583	
40548:	AAGTAGTTTCTTCGGTGTGTAG	-----	AGCCTGGCTGGCTT		tilapia
12527:	TTA.G.CCC.....A.C.	-----	ATA.C.....		striped_bass
40179:	.TAATTC..T..TATG.CCCTA	-----	TTACCG.TAGAA..TTTAA		pufferfish
63323:	T.CCT..CAT...T...CCGA	-----	AGTTT.A.A.T...T...		horn_shark
100361:	G.AG...CG.CCACT..CC...	CAAGGCAGGGGAATG...G...	CATC.		Human
95824:	TGAGG..CG.CCACTA.CAAG	-----	CTGGGGAGC...A...C..C.		Mouse

	40588	40598	40608	40618	
40584:	TTA-----ATTGAAAGGCATGCAGAGTATCAAAGGAGGCATGAGCCAA	-----			tilapia
12563:	A.....				striped_bass
40220:	.CG-----GG.....-GC.TGA.	-----	T.CA..T...A.CTTTC-		pufferfish
63364:	G..TCACCGG..A..TAA.G.TGT...	CC.GGCTTG.A..GA.A...T			horn_shark
100411:	..G-----.A...C..AA-G.....C..T..CC.CTT.CTC-----				Human
95869:	..G-----.A...C..AA-GC.....CC.CC.CTT.C-----				Mouse

	40641	40651	
40628:	-----ACAC-----CCCAGCAGGACTACTTTAAA		tilapia
12607:	C...		striped_bass
40257:	-----T.A..TG...A.T....		pufferfish
63414:	AGCTAAGAACAC...TGACTTCCATTGAA..TT.GGAA.TA.....T		horn_shark
100446:	-----T.T.TATTT..AGT...CCT		Human
95903:	-----T.T.TATT...A.T..CCCT		Mouse

	40661	40677	40682	40692	
40652:	TTGTTGCAAAGATGCTTTA----	AAAAAAGT-----	TGTGTTAGCGAATG		tilapia
12631:	.ACACA..G...ACT.AA.-----	AC			striped_bass
21897:			A.AT..G..		striped_bass
40277:	..AA.AA.T.T.....GCC-----	.C..AC-----	A.CG.TC.T...		pufferfish
63464:	..T-----A.....C..CCAG..G..GA.CCCGC..C.AACC.A...				horn_shark
100470:	CAG.-G..A..-----	GG.CA.-----	GA...TT.GC		Human
95927:	CAGGGG..A..-----	GG.CA.-----	GA.A..T.GC		Mouse

	40704		
40693:	CG-----TGTGTGTGCA		tilapia
12722:	..TGTGTGCATGTGTGCGTGGGTGGGTGGGTA		striped_bass
21911:	.....		striped_bass
40317:	TTGTTTTTTT.A.TA.A.....		pufferfish
63509:	.T-----A.T.ACA.CTTAAACCAAAC		horn_shark
100505:	..GC-----GAAAG.TC		Human
95963:	..GC-----GAAAG..C		Mouse

	40714	40724	40732	40742	
40705:	GGTGGTAATGGAGTAATTACAGGC	-----	TGCAATTAAATATG		tilapia
12754:	..G.....T..A...-TGA..	-----	AT.....T.GC.		striped_bass
40337:	.C...T.A-----T	-----	AA...A...G.		pufferfish
43758:	..T...AAT..A..A.G.TT.T	-----	TT...A.CG...		zebrafish_a
63532:	AA.T.GC..TCGAAT...TTGCT.AGCCACAGACAT.TT...A.GT...				horn_shark
100519:	..T...A.TT.AG...CTGT	-----	CTTTGC.C.T..CA		Human
95977:	A..T...A.TT.G...CTGCC	-----	AAGGC.TCTC.CA		Mouse

40752
40743: CACTTACAAAT-----
12791: ..A.C.....
40361: ..AA.....
43795: A...AG-----
63582: A.AGAG..G.GATA-----
100557: G.GC.G.CTGCGCGTCTGG-----
96015: G.TG.T.TTGCTTGTCTGGCCCTGGGGCCTTCCGCTCACAATTTCCCTCC

tilapia
striped_bass
pufferfish
zebrafish_a
horn_shark
Human
Mouse

40760 40770 40780 40790
40754: ---GAATCAATTATAGACATTTAAATCT-----GTGGGTTTTTAT
12802: -----..AAGA.TGAG.C.C.CG..GATTCCAACACTACAA.....
40366: -----T...T..CG..A.C.....
43801: -----G.A....TA.C....T-----AAAA.ATT.C.....
63596: -----G.CG.G...A.G...G-----AA...CA..A..
100576: -----C.C.GC.....GGGGTCTTTCCCTAACACTCCCC.CC..
96065: CCCAGC.....GAG.GTGA.G.GGGT.GCACCTGGATT....CAAG-G.

tilapia
striped_bass
pufferfish
zebrafish_a
horn_shark
Human
Mouse

40800 40810
40791: TGTAAGATCCAATTTTAAGAACACT-----
12844: .A.C..TA...G...G..T.C..-----
40383: -----
43833: G.G..AG.GT.G.A..T.A.CT.T.-----
63625: A.GTT..C.G....ACTT.C.T.T.-----
100614: CCCCTAGCT..G..CGGG.CCTGGGGCAGAGGGGGATGCTCGCTGGGGAC
96114: G.A.G.TG.AGG..C.TG.GCTG.....GGC

tilapia
striped_bass
pufferfish
zebrafish_a
horn_shark
Human
Mouse

40832
40816: TTAATTA-----AAAAAAAAAAT
12867: .C.....TTGCTTCATGTAGTATCATATTTTCATACATGCA.GG.....A
40383: CG..C.G-----GTC.....TC
43858: ..G.A.....T...T....
63650: C.....
100664: .AGGCC-----GG.GG..GG.
96142: C.G.C.....GC.CTC

tilapia
striped_bass
pufferfish
zebrafish_a
horn_shark
Human
Mouse

40844 40854 40863
40833: ACAAATAC-----AGTCCCACATTACAATAAC-GTTA
12917: .TGC..TT-----TC.G.A-----A...
40400: .TTCG.TT-----T.TTA.T...T-----A...
43875: ..
63657: TT.GG.TT-----TA.TTTTTT..TA.....AGGT
100681: G.GGGCT.TGGGACAGCAGCCTAACG...G..CTG.CTACT.GT.-TG.C
96157: TTCTG.C.....CAT..TAG.CTGCT.GT.T...T

tilapia
striped_bass
pufferfish
zebrafish_a
horn_shark
Human
Mouse

HoxA7a:2
40873 40888 40898 40908
40864: TTTCTGTTCA-CGCATCT---CATCT-TCCACAGATCCAAATCGAAAGCG
12936: .A.AGAGCT.GT.....TC.....CC.....
40424: ...G.A..GT-...TG.....GT.....G.G...G.....
63684: C..A..G.TGCT.TT.T--ATC...-T.T...GA..GG.CA....A..
100730: C..G.....-T.TG...GCATG...G.T.T...GA..TG.CA.G....
96189: .G...A.CT.-TATG..CAAATT...G.T.CT..GA..CG.CA.G....

tilapia
striped_bass
pufferfish
horn_shark
Human
Mouse

HoxA7a:2

	40918	40928	40938	40948	40958	
40909:	AGGACGGCAGACCTACTCCCGGCACCAGACGCTGGAGCTGGAGAAGGAGT					tilapia
12982:	G..G.....T.....C.....T.....					striped_bass
40459:	G....TT.....T.....					pufferfish
63731:	TA....TT....A...T...A.....A..A.					horn_shark
100779:	G..C..C.....A.G..CT.....					Human
96238:	G....C.....A.G..CT.....A.....A.					Mouse

HoxA7a:2

	40968	40978	40988	40998	41008	
40959:	TCCACTTTAACCGCTACCTGACCCGCAGACGCAGGATCGAGATAGCCCAT					tilapia
13032:	C.....G.....GA.G.....					striped_bass
40489:	.....					pufferfish
63781:	.T.....T.....T.....G..AC....T..A..T..T..C					horn_shark
100829:	C.....G..GC.C..C.C..T..A..C.....C					Human
96288:	...T..C.....G..GC.C..C.C.....C..T..C					Mouse

HoxA7a:2

	41018	41028	41038	41048	41058	
41009:	GCCCTCTGCCTCTCAGAGAGACAGATCAAAATCTGGTTTCAGAACCGCAG					tilapia
13082:	.....					striped_bass
40489:	T....A....C....G..G.....CA.....					pufferfish
63831:	..T..G..T..A.T.....C.....A.G..					horn_shark
100879:	..G.....A.C...C.C....T..G.....C.....C.					Human
96338:	..G.....A.T..C.C.....G.....C.....T..GC.					Mouse

HoxA7a:2

	41068	41078	41088	41096	
41059:	GATGAAGTGGAAGAAGGACCACAAGGACGAG---CCGAG-----CA				tilapia
13132:	A.....A.....G..A---...GTGTCGACCCC.T				striped_bass
40526:	A..G....A....AACAC.A---...GTG-----TG				pufferfish
63881:	A.....A....AAC...A.CT.G.AGCT.T..CACCACAAG.G				horn_shark
100929:	C.....A..G..T.....				Human
96388:	C.....A..G..T..A..T...				Mouse

HoxA7a:2

	41106	41116	41126	41136	41146	
41097:	ACGAGGAACAGCACTGTGATATTCAGGCACCGTCGGAAGGCAGGGAACCC					tilapia
13179:	C..GA...A..G.....C...C.GGT...A..G.C.GAA..G...					striped_bass
40562:	CA.GAA..AG.G..GCA....CAG.T-----..CA.GG..G					pufferfish
63931:	.G..AA....G.A..A..CT.C...					horn_shark

HoxA7a:2

	41154	41164	41174	41184	41194	
41147:	AAAGCTG--AAGAGACCCGAAGCGGCCGTGTTGACTTAGGAACAACCTGCA					tilapia
13229:	T-G.ACA....G....C.G..T.G.TG.C..A..GG..A.					striped_bass
40600:	G...G..CAG...A...G.GG.G..GG.G....A..-TAGG..G....					pufferfish

HoxA7a:2

```

      41204      41214      41223      41233      41238
41195: AAGTAA CAGAAAGAGACGGACAGAAG-ATCAAAATAAAGAAAC-----ATA
13278: .....GA.....T.....AG..C..T...TG...G...GCACT..T
40649: ..AG..GGA..T.A.-----T....T...TAT..TG

      41248      41258      41268      41278      41288
41239: ATGTGTTAAATATTGTCTTGGAATGCATCGAATTTCTGACATAACACTTG
13328: .A.....GGG..ATA.C..AG...-----..A..C.....C..T.CA

      41298      41308      41321      41331
41289: GGCACTTTTTTTTTTTAAAGTCTCACTAAT-----CATTTGAGAGTAAT
13371: T.....AAGAGC...GT..G..G.A...GTGAATGA..GC...AG.C...

      41333      41343      41351      41361      41371
41332: C-----CACATTTAAACACTACA--CTGCTTTTCTGGATTTTCATATT
13421: TATGTAACAAG.....CAGT.GT.GG...TAGC....T.....

      41386      41396      41406      41413
41372: TAAACC-----AGCACTAAAAATGCTTCACGTGACAAATA---ATAACTA
13471: .....TAAAA.....-.....G...C.G.A...A.C.GCGAT.....

      41423      41433      41443      41453      41463
41414: CCTACCCTAACTAGTCTGTATTTTTATATCCTCCGCATATATCGCATAGG
13520: ....T..A.....-----.....ATG.AAT.....-----

      41473      41483      41502      41512
41464: AGTACTACAAATATGGCACATTTTGGACT-ACAGAAAACACTACTACTGAGT
13553: -----..C...T.....A.C..G..T.....A.

      41522      41532      41542      41552      41562
41513: TAACATTCCTTCAACAAAAACAAACTACCTAATATTTACCTTATAATTT
13586: C.....GA.TT-----.....A..G.....GC....A.

      41572      41582      41592      41602      41612
41563: TCAAAAAGTGACACGGGAATGTAATCACGAACTGAGCTGGTGATTTAATT
13631: .-...C.C.....AA.G.AT.C.A.G.A.GT...AA.T.ACTG.A...

      41629      41638      41648
41613: GATGGTTT-----CCTGTTTTCCACCG-CGGTCTTATTTTCT
13680: ...AA.C.ACCTAACGGAATA.A.T..C.....A.A...TG.....A.

      41658      41669      41679      41689
41649: GAAGGGAAGGAATACA-----ATTCAATGTGCCTTATTTTGAATCGG
13730: A.....CA.....GCAGTCTGCG.AA.....G....AAA

      41693      41703      41710      41720
41690: G-----TAAAGGCGAATGTT---TtagTTAACTGCCTTTGA-----
13780: .GCTAAT...A.T.....TTG.....A...T...A.CTGTGATT
```

tilapia
striped_bass
pufferfish

tilapia
striped_bass

tilapia
striped_bass

tilapia
striped_bass

tilapia
striped_bass

tilapia
striped_bass

tilapia
striped_bass

tilapia
striped_bass

tilapia
striped_bass

tilapia
striped_bass

tilapia
striped_bass

tilapia
striped_bass

41723:	-----TAAAATAATT-----ACTGAGTTTCTTCTTCGC	41725	41740	41750	tilapia		
13830:	TAGGTGCTTCTTTAGAT.TT.....GTGCC....T....T.AT..GAT				striped_bass		
78432:				..	horn_shark		
41751:	CCCCCATCCCCCACCCTTATAATTAACATGGATTTTAATCCGCCTG	41760	41770	41780	41790	41800	tilapia
13880:	TTTATT.....TG.T.AT..C.....A..G.....AT.....						striped_bass
78434:	C.....						horn_shark
41801:	CTAGGGGTGAGGATTTA-CTATAGACGC-----AAATAT	41810	41819		41834	tilapia	
13921:	T.-----T.ACTT.....CC.....T..ATCCCAGGATTAATAAA...C..					striped_bass	
41835:	TTGTTTAGTTTTG-----CATGTAACCTACCTCAGATTCC-----	41844	41856	41866	tilapia		
13967:	C.GATGAACTT.....C..AGAAAGT				striped_bass		
41870:	TCACTCGCTCACTATACCGTCA-----GCGATTGTGCCG	41879	41889	41893	41903	tilapia	
14017:	CG..AT...T.TA...TT..A.ACAGGAATACTCCAAC.TA.A...TTT.					striped_bass	
41904:	TAGGC-----TACTGTGAAGATGTAGCTTTACAGA-----TTAGGC	41914	41924		41939	tilapia	
14067:	A..T.TTAGCCGTG.....GA..T.TCT.....C.GATTG.C....					striped_bass	
41940:	TT-----ATAAATACATGTACCGT	41948	41958	tilapia			
14117:	.CAAAATGTCATACGTGTTTTTAAATGCCAGCG.....G....CC.TT.			striped_bass			
41959:	TACCC-----AGCTGGCAAT---ATCCATCATTTTATAATCGGAGAAAT	41972	41979	41989	41999	tilapia	
14167:	..TTTAGACAG.AT.TA..T.TCCG.TTT.T.G.G..A...GA.TA.GG.					striped_bass	
65860:	.AT.....G---.TAT.T.....T...A.AA..C...					horn_shark	
42000:	ATTCCAGTACAGTGA--GCAAACGCTG-----C	42009	42017		42025	tilapia	
14217:	...GT.A.C...CA.GT....TA...TGATATATTTAGGTTTAGTGCC.					striped_bass	
65896:	..C.G.ACG..A.					horn_shark	
42026:	TGGCTTTCAATAAAAAGTGCTAGGCCTGTAAAGTAGTCTGT-----	42035	42045	42055	42065	tilapia	
14267:	AC.G.....-----T.GAAT..A.....A.A...GAACAAATCT					striped_bass	
42066:	-----CCTGTAAATGAAGTGAA	42072	42082	tilapia			
14310:	TAAAGAGTCTTAAATCTCTGGGAATGTCTCATA.....G.-----			striped_bass			
42083:	CGCGCAATCATTTAATAAAAATGCTTTTACCCTCTCTATTTGGTTTCATT	42092	42102	42112	42122	42132	tilapia
14357:	TATAT.--...G.....TA.....-...GA.....T..C....					striped_bass	

42133:	42142	42152	42156	42165	42175	
14404:	CCATATTTACCGTGT	TTTATTA-----	AAATATC-	CATGCAAGAAAATGA		tilapia
	.A.....TG.CAAC...	A..TTGTGC..CC.C.G..	AT..CA.T...	A.		striped_bass
42176:	42182	42192	42202	42212	42222	
14454:	TT---GTAATCGCCCCCTGGGTCGAGTAATATTGTGTTCA	CAGTTACCAT				tilapia
	.CACA.C...TA.G.G.C-...	T..A.....	-----	....	C	striped_bass
42223:	42232	42242	42252	42261	42271	
14492:	TAAGTGACCTTCAGTGTGAC	CAGTATTGGGTTG-	CATGTAATGAGACATG			tilapia
41336:	...T..C.G.C..C....GT..A...	A.....C.....	A...A.			striped_bass
			..C...C.A...CT			pufferfish
42272:	42281	42291	42301	42311	42321	
14542:	TTACAGTCCATAATGGGGGTTAGGTAACAGTGAAGTTGGGGAATGTGAG					tilapia
41350:	..G.....T...A.....	C.AG.....	A.A			striped_bass
	..CTG.C....C..AT.T.C---	CCAC..CA.A.....				pufferfish
42322:	42331	42341	42351	42361	42371	
14592:	CTATGAGGATGCGAGATGGGACAGGCTGCAGATGAAGGGAAATTACTGTT					tilapia
41397:	C.....	G.....	A.....			striped_bass
49908:	.....	G....T..A.....				pufferfish
			..A...C			zebrafish_a
42372:	42393	42398	42407			
14642:	GAACTC----TGCTTTC-----CCTCCTCGCTGG-----GTAAGATGG-CG					tilapia
41447:	TGCAA.T.CC.....	T...CTC...TATGCA...	G.....A..			striped_bass
49915:	.....	G.....	T..T.TC..CT-----T.....			pufferfish
	..GA.T----.T..C.TTGTG.TC.TC.T..TT-----	A.....				zebrafish_a
42408:	42418	42428				
14688:	CC-TGACGC-----TGACCTGCCCTCCTCCCT-----CCCTCC-----					tilapia
41483:	..A...TCGGTGAAACA..C.AC.G..C.....	CATTGG...C.TCGCA				striped_bass
49955:	..-C.GT.G-----	..GGTGA...C..CT.T-----	T..T----			pufferfish
	..-....TG-----	CA.T.CAG..C...T.TC---AG..AG.G----				zebrafish_a
42440:	42449	42459				
14738:	TTTTTCTGT-----CTCTCTCTCTCCCCCGTCC-----					tilapia
41515:	..C..TA..CAGTGTTTTA.A.C.C.C.C...	TAT.TTTTTTCCCCGTA				striped_bass
49989:	-----	CTC.A...A..T.-----	TCACCA			pufferfish
	-----					zebrafish_a
42469:	42477	42487	42497	42505	42514	
14788:	-CTCTCCCTCCAGCTCT	GGGCCATAAATCCGTTGTT-G-TTTA-TGAAAA				tilapia
41539:	T.....	GA...T.....	C.-...G.....			striped_bass
49989:	G.....	G..G...CT.....	G.C.....			pufferfish
66485:	-----	TCATGAGAA..T.....	T..A.....			zebrafish_a
103252:		.T.....	.T.....			horn_shark
98766:		.T.....	.T.....			Human
		.T.....	.T.....			Mouse

	42524	42532	42540	42550	42560	
42515:	TTTACAACATAG--CCATACAAGTTT--ACGACGCGGCCCGGGTTCCCAT					tilapia
14837:	GT.GT.A.....C.C.TA.....C....T..ACA..AT..					striped_bass
41586:	C.---.G.CGT..C.---.....GCG.A.T..TC.C..T..					pufferfish
50028:	T.T.T---.....C.---.....GCT.C.G.T....T....					zebrafish_a
66514:	T.T---.A...G..C.---.....GTT.TT.G.TT..T....					horn_shark
103282:	T.T---.A.....C.---.T..GTT.TT.G.CCC.T....					Human
98796:	T.T---.A.....C.---.T..GTT.TT.G.CCC.T....					Mouse

	42569	42579	42588	42596	42606	
42561:	TGGCCGC-AGCTTGTCACGTGGCTG-GGAGC--CATGAACATGAACTTTT					tilapia
14887:	CA-GCTG.....A.AC-C.....G.....					striped_bass
41632:	...T...-.CGA.....G.A.....G.....					pufferfish
50074:	...TTA.A..TCA.....TT.T-AAGA.CA...A...G.T.....					zebrafish_a
39274:	-T.AAA...T...AGT-.T.A...G.....					zebrafish_b
66560:	-T.TCG...T...A..A..A..G.....					horn_shark
103328:	-T.TCG...T...A..A..A..G.....					Human
98842:	-T.TCG...T...A..A..A..G.....					Mouse

	42616	42626	42636	42645	42655	
42607:	TTTTCTCCTTTTTTATATTTAATTTTCAATTGCGG-GCTAGAGGAGCCTT					tilapia
14933:	C-----A.....C....A.A..A.A.....C.....					striped_bass
41679:	.A-----G.A.G...C...A.A..-AA....AC.....					pufferfish
50123:	.					zebrafish_a
39290:	T.TT.....T.T...TT....					zebrafish_b
66606:	.A-----C.CT.					horn_shark
103374:	..					Human
98888:	..					Mouse

	42665	42675	42685	42695	42705	
42656:	TCATTTAACGGTCTCGGGCTTCCACGGGAACCTTTTCACAGGCGACCTTC					tilapia
14971:	T.....T.C.GCTG.....CA..A.....					striped_bass
41715:	GG..C.ATC.....T...GTA.....C..TT---G...					pufferfish

	42715	42721	42731	42741	
42706:	GTCATTTTACCAT-----GTCTCACATGTACTTTTGGGGAT				tilapia
15021:	TA.....TA..CCGCCAAGGGGCAAAT...TT...-..T...AATTT				striped_bass
41763:	TC.G...TA..C-----T.TTG.A-C..A.C.TCT...				pufferfish

	42748	42758	42768	42778	42783	
42742:	TT---TTTCTAAGGGGTGAGGGGTGAGATGTTAGGCAGAACCTC-----G					tilapia
15070:	..ATT....CTC-----CG.....GG.....CA					striped_bass
41798:	..-----CA-----C..C...CT..G.TGG.GGGT.TTTTTCA					pufferfish

	42793	42802	42812	42822	42832	
42784:	ACGAGCAAGGAGC-TTACAGTAAGACATGCCTGGATCACCTTGGGTGCCTT					tilapia
15101:	.A.C..C...G..T...TTAC.GA....AG....G.T..T.----G.					striped_bass
41835:	T..C..C-T.....C.T.T.GG.....TA.....GTT...AT-----					pufferfish

	42841	42851	42861	42871	
42833:	GGCGG-GCTCCTGAAAGGTAATGGAAAGATGAGACGAAGGAACC-----				tilapia
15147:	AT...T.TCG...C.T..TT...C.....GG.....G..CCGGTG				striped_bass
41877:	--...-A..G..C.CGC...T..TC.G.....TG...A...TCTGGTG				pufferfish

42876:	42878	42888	42898	42908	42918	
-----	GACCCCATGGAGAACCAAGCTTCCGTAAGGGGTCTCAGCCGG					tilapia
15197:	CGTCACT.....	GAGC..C.....	CC....A.....	T..		striped_bass
41924:	CGTCATT.....	A--A.GAGC..CT.T.....	TCTC..A...G..T..			pufferfish
42919:	42928	42938	42940	42950	42960	
GAGACTTTTCCCGTCACTG-----	CACCTGCCCACTCCCTCCAGTC					tilapia
15245:	ATACT.CC..T....T....	GCCGTCTG.....	A.....	CC..		striped_bass
41972:	ATATT.CC..T-.....T.	ATCCGTCTA.....	A.....	A..TCCT		pufferfish
42961:	42967	42977	42987	42997		
-----	ACCCCTGTGTTTACATGCAGAGACCTTCACAAGGT				tilapia	
15295:	TT.T.C-.....	A.....	C.....		striped_bass	
42021:	CCACAATGTACAA...TA..A-C.C....CA.	-----	T...		pufferfish	
42998:	43007	43017	43027	43037	43047	
AAGGCAGCTTACGCTCGTCAGCCGGTGCATGTGGTTGACAATGTACTTGT						tilapia
15331:	...A.....G.AA.	-----	CTCT.T.TG.CA.			striped_bass
42064:	...A.....A.A.AA.	-----	A.....C..CTTTT.T.TT.AA.			pufferfish
43048:	43057	43067		43081		
TTGCATCTTCTTAAAGCAAGCAACTTA-----	CTTTATG				tilapia	
15369:	TG....A.....	AGCAAATAATAACCTTT...G..			striped_bass	
42104:	..AA.	-----	..AT..T..G		pufferfish	
43082:	43088	43098		43109		
GGTT-----	CGCCGGCTTTGATTTTGT	-----	AGAG		tilapia	
15412:	T..GTGTTTAAATATCA....TCA....TC.....	TAAAAATCC..TT			striped_bass	
42119:	-----	C...CA.GC..	-----	GA.C	pufferfish	
72110:				...T	Mouse	
43110:	43119	43138	43148	43158		
ATTGAAATCCTGGAAAGGA-ATGGTTTCGTGTTACAGTTGATCTTTATCA					tilapia	
15462:	G..TC.....TGG.A..G.....A.....	TG.T-.GG..G			striped_bass	
42134:	...T....G..AT.T.TT.---	A...TAA.CT...GGTGA.A.A..T.			pufferfish	
72114:	G..T....TGAACC....-	C..CA...C...G..C..			Mouse	
43159:	43168	43178	43188	43198	43206	
GGATTCCCATCACTGATGCTTCGTGTTAAATCTGATTTAT--	CAGATTTA				tilapia	
15511:	T...TTA..G..A.T....A..TG.....	A-----	---T..G...		striped_bass	
42181:	TTT.CTTA..GT.AA----	CTA..A....T.-----	G.CG.T...CC		pufferfish	
43207:	43216	43226	43236	43246	43256	
CAAGCTCTTATTTGATAATGATGATTATTATTAATAATATTTTAACATTT					tilapia	
15554:	-----	...A.CAT...GC.CCGG...GG.T..G			striped_bass	
42222:	TTG...A..C.-----	A..G.CAG..GT.T..TGCC.-G.T...			pufferfish	
43257:	43266	43276	43286	43296	43302	
AACATTCAATTTTGCAGTGAGCTTAGTGTGTAGGCTGTCTGGAT----	T				tilapia	
15582:	CGTC..GG.C..CCTGT..-----	GT.T...C.T....TGAC.CCTTA.			striped_bass	
42260:	...TG.GGCA..	-----	GT.T...GA-----		C	pufferfish

	43312	43322	43332	43342	
43303:	GTATTTGTTGGTGGATT	TAAATGGGGATGT	GCTTTCGGGT	GGA-----	tilapia
15627:	T.G.....T.....G..AT.....G.....TC.CCT..AAAATTC				striped_bass
42283:	.CG..CAA....AT.A.-----G..G.C-----				pufferfish

	43353	43363	43373	43383	43393	
43346:	--TGGATGATGGGCAAAGTATGCGCTCTTTGACGCCCTCCTGTGGAGGC	A				tilapia
15677:	AT.....G...C..G.AG.G.TT.....TTAA.					striped_bass
42306:	--.AA...C..-----T.....G.....AA.					pufferfish

	43403	43413	43423	43433	43443	
43394:	GTGGGGCTATTGTGCTTGCAGCTCTGCGTGT	TTTTTCTTTTCTTTTTTTTG				tilapia
15727:	C....-G.G.....G.....-----C.G.....					striped_bass
42341:	C...A-.GC..C-A.....-----G...G.....					pufferfish
50723:				T....T.....		zebrafish_a
41758:			..A.....T....T.....			zebrafish_b
69613:	CCT...T.TA.....TT.CC.CC.TC.....C....C					Human
73686:	..CA..CG....TG.G..CT....C..C.....T....T...					Mouse

	43453	43463	43473	43481	
43444:	CTGCAAATGAGAG-----AGGTCGACATCTGTGCATCCAC--GTG				tilapia
15761:	CCATCAGCCA---.T.....C...A.TTC.A.CT--...				striped_bass
42372:	G..T-----T..T.A.....TTCA.G..-A..A				pufferfish
50743:	..AT.				zebrafish_a
41783:	T..T.GG.TTA..CTAATCAAAT.ATCTA.A..G..GA.TGA.CAAAA..				zebrafish_b
69657:	....				Human

	43491	43508	43518	43528	
43482:	TTTTATTCTATGTGCCTT--GTATGT-GTGCATGTAGGCCTCAGCGTGAT				tilapia
15806:	.GCCCA.TC..AATG...CAAGG.T.CA.A.....C.GA.TCAC.				striped_bass
42405:	A.AGC..TC...T-----AG..T.-----TC				pufferfish
41833:	AA..T..A...TTA				zebrafish_b

	43538	43547	43559	43569	
43529:	GTGCATGGGGTTAATA-AACAGGATGAC-----AACCACTAAACATT				tilapia
15856:	..A...T.AA..G...-.TT.A...AGTTTACAGTG..GA.A.C..T.CC				striped_bass
42427:	A.ATCCT..T..GT..C.G....T..T.TT-----TTTT.T.T.GAT..				pufferfish

	43579	43589	43597	
43570:	ATTACACTTAAAAATGCATTTTAA-----AATGATC-----			tilapia
15905:	...T...CGTTTG.ATG.C....TTGACACACAGG...TC.CTGTCGA			striped_bass
42471:	...TT...GTT-----TTC-----			pufferfish

	43609	43619	43629	43639	43648	
43601:	-AGATATTTTAATTGTAAAATGTTTCTTTTCA	GTCCTCTGTCCATAGAT-GC				tilapia
15955:	TG..AT..A..A..CG.C..A....GC---.....TTGC.C..C.G					striped_bass
42489:	-.A.GG.--G.G..AG.G...A..A.CGG---.T-----A					pufferfish

	43658	43668	43678	43685	43695	
43649:	TGTTGTTCCCGGTGTTGCCGAACGTAAATCA---	TAACATTCATGTTGC				tilapia
16002:	C.A.....GAC...A.GC.C...ACAGCCT.ACT..A...T					striped_bass
42519:	C....A..T.CT.-----G.T..GCCA.....CTTGT.C.G					pufferfish

43705	43715	43724	43734	
43696:	TAGACTGTAATTAAT-----	ATTTAATAAAATG-	CATCGATGCAA	tilapia
16052:	G.C...C.G.G.T.TGTTTATTGCT.....	T.TT..T..GTC.G....		striped_bass
42558:	A.T...TC..-----		A....	pufferfish
	43750	43760	43769	
43735:	AAAAACAT-----	GCAATGTATCCCCCAATCAG-	TCTTAAC	tilapia
16102:	CC...T.CTGAAGATTAGAAAT.G..	A.C.CAGA.AGG.TTA-.T...C.		striped_bass
42574:	C...GT.A-----	ATAT...C..T.AAA.T.A..A.T.CTG.		pufferfish
	43777	43787	43797	
43770:	AGGGTG-----	ATTTAAATGCATCAATTGCAGT		tilapia
16151:	.A.A.ATCAATCGTGCAAAAGTGCATGTGG.....	A.....A.AT.A.		striped_bass
42612:	T....A-----		T.TG--C.TG..	pufferfish
	43807	43817		
43798:	GATAAATTTCCCTGTTCTATATGTCA-----			tilapia
16201:	.T.CGT....---A....GC....	A.CATTTGCTCTTTCCGGGTTTTTTC		striped_bass
42635:	.C.....C.----CC.AGA.AA.AGTATTTACATTGT-----			pufferfish
	43833	43843	43849	43859
43824:	TTTCTGCATAAAGAGTATGATTTT----	TTTTGCTTGAACGACCGTAATT		tilapia
16248:	.C.T....A...T...T.C.CA.CAATG.GC..	TGGA..AA.....TGC.		striped_bass
42669:	.A.GGATGA.C.T.TGT.T....	ACTT.C..TTAG.-----		pufferfish
	43878	43888	43898	43903
43870:	-TCTTGGGGTAAACACGTGGATTATAGGCCACG-----	AAC		tilapia
16298:	G.....-----	TA..TT.C...T..TCT.CTCATCGTATTCCAC..A		striped_bass
42706:	-....TTCAG.-A.T...T.G..CTA-----		T.A	pufferfish
	43909	43917		
43904:	AAG-----	AAAGTGAC-----	TTTA-----	tilapia
16341:	...ACATAACTGTCCTA..T....	CACTGAGAGTCG...CAGT-----		striped_bass
42734:	..T-----	..TT..C.TTCTGGGCGTTG.C.TCGTTTTGTC		pufferfish
	43924	43934		
43919:	-----	AATGTTTGCTCAGAAGCTA-----		tilapia
16386:	CGCGC----GTAATG..A...AAG.....	AA..AATTAAGATAATACGAA		striped_bass
42770:	CCTGCTTTAGTTTG...A.G.AGG.....	AA..AATTAATA-----		pufferfish
	43943	43947	43954	43964
43938:	-----	CTACGAGT-----	GTGTG---AGTGTGCCTGCAAA	tilapia
16432:	ATTTTATTTGTATC..C.....	GCTGGC.....G.....G.		striped_bass
42811:	-----	G..A.T.-----	T..CAA.A.CC.A.....G.	pufferfish
	43974	43984	43994	44004
43965:	GTCGGAGAGCACCGCCCCCTTCCTTACCAGTGACCATCGTACCCCTT			tilapia
16479:	T...T...GTT...C-----		G.....	striped_bass
42841:	G.....	TT..TG.A.A.T..GGCA..GG..A.A-		pufferfish
99496:	..T.....C.A...C.....C...			Mouse

	44024	44034	44044	44054	44061	
44015:	CACCCCTCTCTCAACCCGACAAGTCAGACACCAGCGCGCTCTCACT	---	C			tilapia
16509:	-----G...C..GT.....T..TT.....T..T....A.....TCTT					striped_bass
42873:	-----AG..T..T..C.G.T...C.GC.T..A.A...GT.----					pufferfish

	44071	44081	44091	44101	44111	
44062:	TGCTCTCCTTTCTTTTCGATGCCTGTGTTT	AGTTCCCTGGGTGTGTCCCT				tilapia
16554:	.C.....-..G.C.T.A.---	A.....T..				striped_bass
42908:	.C..T..ACG.....A-.CC..A.---	G.AC.....TC				pufferfish

	44121	44131	44141	44151	44161	
44112:	GGCTCAACTCAGAGAAGTAATTTTCGTGGGAACTTTGTTGCCATTGGCCA					tilapia
16600:	G....G.GC..A.....					striped_bass
42954:	G.AGT.CG...A.....C.A.....T..					pufferfish

	44171	44181	44191	44201		
44162:	ACCATAAATCAGCTGTTGTAGCTCGACTGTTTAGCCAACACAAACTC---					tilapia
16650:	G.....G...AT.G.....C..A.ACA					striped_bass
43004:	GT.....C..A.A.-----C..A.ACA					pufferfish

				44220		
44209:	CGCGCA-----TAGCTT					tilapia
16700:	...A..CACACACACACACACACACACACACACACTCAGT..AG.C					striped_bass
43039:	.A.A..CACACGCACGCACGCACGCACGCACGCACGCACGCACG-----					pufferfish

	44230	44240	44250	44260	44270	
44221:	TCCTCTCATTTGTGGGCCAACACTGGGTGTGTAGGAGCCCGGTATTCACCC					tilapia
16750:	.T.C..T.....A.....					striped_bass
43083:	-----C.CG.AC.C.CA...A.					pufferfish

	44280	44290	44300	44310	44320	
44271:	TTCCTAAAGTCGCGCCTTCTGGGAGTGTGTTAACGCACTCTCTCTCAC					tilapia
16796:	C.CA...T.....C..C.T...C.....AAGG					striped_bass
43104:	ACA.AC.CAC-----A...A.A.A.A.A...					pufferfish

	44330	44345	44356			
44321:	ACACACATACCTGAGA-----CTGAATAAATC-----CATCCCACT					tilapia
16837:	G...G.....G.....A.....A---ATCAAT...T...					striped_bass
43132:	C..AC..T.TTTTCT..G...G..ATAGACCCGT.C...T.A.					pufferfish

	44364	44380	44390	44400		
44357:	GTTCTCT--GTCAGTCTT----AACACAGGAATGGGCTTGCTGGGTAAA					tilapia
16878:	...TT.-T.....T..T.....T.C...					striped_bass
43182:	..C.TGCCT...AGG..TGGGT....A.CT...A---AA.A..T.					pufferfish

	44406	44416	44426			
44401:	T----GCTCTGCTCCGGGAAACGGCATGT-----					tilapia
16920:	G----.GG...T.ATT.....TA.....T-----					striped_bass
43229:	.TCAC.G...T..T.TTT.CC..A-....TCGGGCTTGCTTGACTAAAT					pufferfish

	44435	44445	44455	44465	44475	
44427:	-GGAGGAAACCTTAGGACAAGTCACTGCCTTCGAGAGGCGAATGTGCCAT					tilapia
16947:	-...G.....G.AG.....G.....A.....G.....					striped_bass
43278:	A.....---.G..A...T..TG.CC..C.....A.ATGG.....					pufferfish

	44485	44495	44505	44515	44523	
44476:	AAAAATTCCACAGGGAGTAAAACAAACGGGAAGCGCCGGAC--TGCGCCA					tilapia
16996:	A.....A...C.....AG.....T...GAG..TT..					striped_bass
43325:	T..A..C.A...C.....---.....TA.----G...T..					pufferfish

	44533	44540	44544			
44524:	TGCCTGTTTC---GCTTCTTTT-----AAAATTTGT---GATTTCC---					tilapia
17046:	C.A.TTAG.....GCCTGGAC.GGC.....GCG...C...CCG					striped_bass
43367:	.A-----.....C.A-----T...G.---					pufferfish

	44568	44575	44585	44595	44603	
44559:	TTCATGAATTAATTT---GAAAGAAAGTCTAAAGCTGACGAAC--CGTTT					tilapia
17096:	..TT..T...CC..CTCA...T...CA.AA.C.ATG.TA..TTTA.ACGA					striped_bass
43384:	-----.....T.G.G.C...GAT..CCT--...GC					pufferfish

	44612	44622	44632	44642	44652	
44604:	TCAAATG-GTGAATCGGTCCGGTTACAGCGTTAAACGAAGCTGGGCCAAG					tilapia
17146:	.G.....A.A.C..T....A.....A..GA-----G..					striped_bass
43409:	..-----C..AAC.T...CC.C-----T.GA.CCTTTA...					pufferfish

	44662	44674	44684	44694	
44653:	TGTGCTGAGGTTTAT-----TGAGCAATGATACATGACTGCTGCAAG				tilapia
17184:	..C.TCAG.....T.TTTAAACG.A.....C...TTC.-----AA...				striped_bass
43443:	...-----A.TT.-----				pufferfish

	44704	44714	44724	44734	44744	
44695:	GAATAGCTTCTAACATATCTAAAAATAACATTATTATTTATTATCAATAA					tilapia
17229:	C..A.AGG.TA...TAC.T.....A..T..AGCC.A.C..AT.T.C.--					striped_bass
43453:	-G...AACTA...-----TG.C.T.GGGG.....A...G...--					pufferfish

	44754	44766	44776	44786	
44745:	TATTTTGTGACGG-----TTTCAGTGATCGATTGCACAGCTGTGTTGA				tilapia
17277:	----C..C.C.TGCTGCAT.ACA.T.....AG.....				striped_bass
43493:	-----G...T.C-----				pufferfish

	44796	44806	44816	44826	44836	
44787:	GAAATTGTTTGGGAATTTTTTTTAAATGATCACAGTGGCAAAAATGAGG					tilapia
17315:	---.....AAA.C.CCAAC.....GT-----					striped_bass
43501:	---C.....GC.....C.....A-----					pufferfish

	44846	44853	44863	44873	44877	
44837:	AGAAAATCTCAAGATC---GCCTTTTCTCTGTCATCGTAAATA-----C					tilapia
17347:	...T.G.C..TAT..TTATTTA...T...AA..GAAG...C.GAAAAT.					striped_bass
43520:	.A...AAAA.GA...---.TTG...T...---TG..C.CACATATT					pufferfish

	44886	44896	44910	44920	
44878:	GTATG	TGCTTTTTGTATTAACCCCTGGG	-----	AATATAAATATGCTG	tilapia
17397:	A..G.AC...	C.....G-----	AAT-----	GT..A...CGAATA.	striped_bass
43561:	A...A--TT.A..G.....	-----	GAA.AAATAC.T.T...	A.AATGT	pufferfish

	44930	44940	44949	44959	44969	
44921:	TTCAGCTTTT	CACCACACTCGCAAAATA	-ATGTTAAAGTTT	GATTGAGTAT	tilapia	
17436:	CAT.	-----	A....GC.G.AAC....	-----	A.CA.GAAT.	
43604:	C..C-----	-----	-----	T.C.A.CA..AGGC	striped_bass	
					pufferfish	

	44979	44985	44996	45006	
44970:	TCTACATTTT	C-----	GGGGACTTAAAAAGC-----	ATCAACTTCACT	tilapia
17469:	AT..TT...	ACATTAAAC.T..T...TAT-----	A.G.....T.		striped_bass
43633:	GA.C....GA----	AAAAG.A.....T.TCACAAGAAA..AG.T.AT...			pufferfish

	45014	45024	45034	45040	45050	
45007:	TC--TAAGCAGCAAATCCTTT	CACCGTGTCTC-----	ATTTTTGCAATAAAGT		tilapia	
17510:	.T-----	-----	A..A.T...T..CAGTG.....		striped_bass	
43679:	ATACC.C.AT.GGGG..G.GA.GT...C.T-----	-----	C..T-----		pufferfish	

	45060	45075	45090	
45051:	CTATTTTTTTCCACCCCT-----	CCACTAATTC-----	CAT-TAAATTCAAA	tilapia
17540:	-.TC.....TTGTTG..-----	TT.T.T.GC.-----	GC.G	striped_bass
43715:	-C.....C....AT.T.AACTCT..T.T.GCTACTT...G.....G...			pufferfish

	45100	45110	45120	45130	45140	
45091:	AGTCATACTTAGCAAAGCCCGGGCTTTGTAGTTTCTCAGGTTATAAAAA				tilapia	
17576:	...--G...GTA..G.A.T..ACAA.G.....C.G.-----	C..G...			striped_bass	
43764:	.A.-----G.....	AC...G.-----	GT..T.A.AT.TGG.G		pufferfish	

	45154	45164	45174	
45141:	GAAGAA-----	ATAATCAATCTTTAGCTTATATGTAAAC		tilapia
17619:	A..AG.TTTTGTGTT-----	G.TC..G.....GT.TGG....C...CG		striped_bass
43798:	...A..CTCAATAAAAGCCGATG..C..G..GG..T...C.----	C.CCG		pufferfish

	45192	45202	45210	45220	
45175:	AA-ATAAAA-ACACGAGAAACTGCAGCTTGGCATGAT--	TGACTGTTTAA		tilapia	
17662:	..C...G..A...AATA..G.....-T...AT.A...AT.....			striped_bass	
43845:	G.-...T.A.A.AA.A..C...A.AA..TAT.AA..GTC.....			pufferfish	
84285:			T...TCA...G.	Mouse	

	45230	45240	45250	45260	45270	
45221:	AGGTCAATATAGCAGAGGAGTCGCCGTTAAATAAGAGCAAAATAACATCG				tilapia	
17711:	.A.....G.AC..T..T..-..T.....CG..T..GT.....AG...				striped_bass	
43888:	-T...GGCC.GATC..C.....A.TT.G...C-----	TGC.....T.			pufferfish	
84297:	.....				Mouse	

	45280	45290	45300	45310	45320	
45271:	GGTTTGGCGCAAAAGGCTTGTAATAGCTATCATCTGAGCATCTGTTCCAT				tilapia	
17760:	...ACAT.....A.....T.---A.....TGGCT.C..GTT.				striped_bass	
43932:	...A.AAA.A..C.-----				pufferfish	

	45330	45343	45353	45363	
45321:	GGAGGGCCATAGTT-----ATATATTTTAAACCTGCTTATAAACGACAT				tilapia
17807:	...ATCGT.C.A..TTAGTAA...G.CAG....-.G...T.....-				striped_bass
43946:	-----			TA...TTT.....	pufferfish
	45373	45383	45393	45403	45413
45364:	TCGTGTGTTTCATATAAAGCCCATATTTATAGTTATTAATTTTTCAAAGTG				tilapia
17851:	---.CC.....TT...T.....A.AC.....GGT...				striped_bass
43957:	---.C.....GT...T.....C...C.....C...TT...				pufferfish
	45423	45432	45442	45452	45460
45414:	GCGTAAAAAAGCAGGC-CTCGGATAGCACITTTCTGTGGCTTTATTC--GA				tilapia
17898:	..A...-CCA..A..AT.TAA..G...-GC..C..T.A.A...TG..				striped_bass
44004:	A.T.GT.-TG.T.T.-T.TTA.CG...-----T..C.....				pufferfish
	45470	45480	45490	45499	45509
45461:	TAAAGTGATGTTTAGCTTTTATTCTTCCCCAAA-CATTATTTCATTAGT				tilapia
17946:	C..T..A.....G.T.....CT...A.....A.....A				striped_bass
44042:	CT.TA.....ATG.....-T....CT.....CA				pufferfish
	45519	45529	45539	45549	45559
45510:	CTTTTTTTTTTTGTTTTTTTTTTTTGCTCTTGAAGTCGTTTCAGATATTTT				tilapia
17996:	CCCACA..AG-----G..T.....CT.G...T				striped_bass
44085:	-AC.CAC-----TCCA.....CTCG...T				pufferfish
	45565	45575	45585	45592	45602
45560:	ATGAT----AAGGCTATATCATATGAGAGAAAAC--GCAGCTCTGTTGC				tilapia
18029:	AT.C.....A-----C.....TT				striped_bass
44113:	...AGATA.G.A..GGTG-----G...C.ACTA...T..CC.T				pufferfish
52866:	..T.....T---TG.....GA.				zebrafish_a
	45612	45622	45632	45642	45652
45603:	GAATGGGCTTTTATTCTATTAAGTGCGCAGACTGTTTACACTCATAGCCC				tilapia
18056:	A...G.....C...T				striped_bass
44160:	-G...AG....C...AGG.G.A...G.GT..T.C...T				pufferfish
52888:	A...T..T.C..				zebrafish_a
	45662	45672	45682	45692	45702
45653:	ATCATAACATGCATAACGGATTCTGATCGAATTATTCTGTACACTATCA				tilapia
18106:	C..A.....C				striped_bass
44209:	C.T.A....A.....T.....G				pufferfish
	45712	45722	45732	45742	45752
45703:	CCGCCGAGATTGCACTCTCAGCATGTCACITGTTGTATTGTTTCAGGAGCC				tilapia
18156:	T...A.....T.....				striped_bass
44259:	GA.TG.....A.....G...TT.....CT.....				pufferfish
	45762	45772	45782	45792	45802
45753:	TTTTTCTTTTCTTCTCTTTTTTTTTTTT				tilapia
18206:	CG..GG-----				striped_bass
44304:	CG..G.-----T..G.....C...C.....C.....				pufferfish
53080:	C.A...G-A.....C				zebrafish_a
111977:	AT.....G.TG...				Human
107501:	AT.....G.TG...				Mouse

	45812	45819	45828	45841	
45803:	CCTCCGAATGACCCCG	---	TGTGC-AGCCACGT	-----	CTCGGAAAG
18234:	T.....	-----	G-----	C-----	AC....
44345:	T.TACG	.T.-	A..ACAAGAATGCTC	..CA.---	
53103:	T.....	ATCGCT	..TC..TC.AG	-----	T..TG-
111998:	AATTC.....	GCCCT	C..G	-----	
107522:	AATTC.....	GCCCT	..A-....GA.G	-----	

tilapia
striped_bass
pufferfish
zebrafish_a
Human
Mouse

	45851	45861	45871	45881	45891
45842:	CGCCGCAGACACGCAGTGC	AACTGTTGAAC	CAGAGGATGGCGCACCACGA		
18273:	G.....	T...A....	G.....		
44391:	-----	A...CG.G.AG.TG	.....	G.....	
53144:	-----GTTT	G.T...C.CGACTC	A.-.....	G.....	GG.T.
74475:				G.....	G.A.G..
112036:	-----	CTGG..GA..AGC	CTGCCT-	C..G.....	T.G.---
107560:	-----	CG.A..GA..GC	CAG.CT-	C..G.....	T.G.---

tilapia
striped_bass
pufferfish
zebrafish_a
horn_shark
Human
Mouse

	45900	45910	45920	45934
45892:	CAATCCAA-AAACCCCAAAG	CCCCGGCTCAGAGTTTGCC	-----	CTAGC
18323:	T...-	C.....T....	T.....	
44435:	A...-	AG.G-----	T.....	GC..
53187:	.C...T.CA...	AG.G.TTTAA.T...	C...AAACTG	T.T
74496:	...C.....	TA.TA.---	GGA...---	G.C.G
112076:	--G...GG-----	TG.A.GG....	AC.G..G-----	GCG.G
107600:	--G...G.-----	TG.A.GG....	ACGG.TG-----	GCG.G

tilapia
striped_bass
pufferfish
zebrafish_a
horn_shark
Human
Mouse

	45944	45954	45967	45977
45935:	CACGAGCGCAGGGAAAG	CGCGCA--CCC	-----	CTTATATCCCACCCAGT
18365:	T...G-	.....	-----	T.C.C.....
44464:	TTT.....C...G-	.....	-----	TCC.C.....
53234:	TG..C.....	T.C..TG--T..	-----	TAACA..T.....T.A
74526:	.G..CC.C.GT-----	TG--...	CACGTTT.CCC.T	..G..AC
112107:	C..C.G...CGC	CAC.....	C.CGCCT	AC
107631:	G...C..C....CGC	CAC.....	TC.TGCCT	AC

tilapia
striped_bass
pufferfish
zebrafish_a
horn_shark
Human
Mouse

	45987	45997	46007	46017
45978:	ATTTCTGCTGCTG	CACGAGTTTAC	CTCTGGAGGTCACCGAG	
18407:	CT-----			A..
44506:	G..CT-----	T.....		AG.
53268:	T.....	TAC.TCT.....	G.....	A..A
74569:	AATTTGTATCACA	GA.....	A.....	T.AGC
112152:	..CC...ATT-----	A.....	A.....	T.AG.
107676:	..CC..CATT-----	A.....	A.....	T.AG.

tilapia
striped_bass
pufferfish
zebrafish_a
horn_shark
Human
Mouse

	46027	46037	46046	46056	46066
46018:	CAGGATTTACGACTGG	TCAAC-AAAAGCACGTGATTC	TTTCGCCATACCCC		
18447:	.....		C...G.....		
44546:	.....		AC..G.G.....		
53309:	T.....	A...A.....	AA.....	G...	
74618:	G..A.....	A.....	CAA.T.G.....		
112193:	.....	A.....	GAA.T.G.....		
107717:	.....	A.....	GAA.T.G.....		

tilapia
striped_bass
pufferfish
zebrafish_a
horn_shark
Human
Mouse

	46076	46086	46096	46106	46116	
46067:	ATATTTGGGTGCCTACGTAAGAGAGAATCAAGTCCATGTCCCACTCATTT					tilapia
18496:	.....					striped_bass
44595:	T.....T.....					pufferfish
53359:	AA.....G.T.C..T.....TG.....T.....					zebrafish_a
74667:	C.....G..G..CG.....A.....G.....					horn_shark
112242:	G..G..C..A.....G.....					Human
107766:	G..G..C.G..A.....G.....					Mouse

	46126	46136	46146	46156	46165	
46117:	CCATAATTCATCATAAATTGTGCAAGGGTGCTATAGGACGCGC-TAAAGC					tilapia
18546:	C.					striped_bass
44645:	.....					pufferfish
53409:	A.....A...-..A..T.AA..CCA					zebrafish_a
74717:	-.....A.-A.GC.A					horn_shark
112292:	A.-A..C.A					Human
107816:	A.-A..C.A					Mouse

	46175	46185	46204	46214	
46166:	ATAAGAGCCACAAATCAAGAACACAGGTT-ATGCTATTTTACCTCTAAAA				tilapia
18595:	C.....T.....				striped_bass
44694:	...C.....C.....T.....G...A...G...C.				pufferfish
53458:	CC....A.....ACT..A.C.GCAGCAT.G...CT.CA...G				zebrafish_a
74762:	CC.....T.A.A.-----T.....				horn_shark
112340:	CCGC.....C.-----				Human
107864:	CCGC.....C.-----				Mouse

	46218	46228	46236	46246	46256	
46215:	A-----TAACCATCAAAAA--CAAGAGCAATACCTACAACAAGCAAACG					tilapia
18645:	AT.....AA...C.A.....G.....					striped_bass
44744:	C-----A..A...G--.G.C.A...C..T.GAG..C..TT.G..					pufferfish
53508:	GTAGTTG..GTA.GT...G--T..C.AT..-----					zebrafish_a
74792:	...A..A.....					horn_shark
112365:	T.....					Human
107889:	T.....					Mouse

	HoxA5a:1					
	46266	46276	46286	46296	46306	
46257:	GTGGAAGTGTCAACAAATGAGCTCCTATTTTGTGGAAGTCAATTCTGCGGTC					tilapia
18685:	T.....					striped_bass
44782:	C.....A.					pufferfish
53537:	-G.T..T.....C.....T.....C.....T.....T.....					zebrafish_a
74802:	T.....T..C..A.....					horn_shark
112374:	T.....A.....T.....					Human
107898:	T.....A.....T.....					Mouse

	HoxA5a:1					
	46316	46326	46336	46346	46356	
46307:	GCTATCCCAATGGCGCGGACTTCCAGTTACATAATTATGGAGACCACAGT					tilapia
18735:	T.....					striped_bass
44832:	T.....G.....GA.					pufferfish
53586:	A.....T.....AT.CC.....C.....T.....AC					zebrafish_a
74841:	...C..A.....C.....A.....T..T..C					horn_shark
112412:	A.....C.....A.....G.....T..T..					Human
107936:	A.....C.....A.....G.....T..T..					Mouse

HoxA5a:1

	46366	46376	46386	46396	46406	
46357:	ACGGCAAACGAGCAATATAGAGACTCAACAGCCATGCATTCCAGCAGGTA					tilapia
18785:	C.....C.....					striped_bass
44882:	GG.....C..GA..T.....A..G.....C.....					pufferfish
53636:	T..T---.GT.GC....GC....T..T..G..G.....GG.....					zebrafish_a
74891:	T...TG.G.....C..G..T..TG..A..G.....					horn_shark
112462:	T..C..TG.G.....TC..G.....GG..GAG.....C..G.....					Human
107986:	T..C..TG.G...A...TC..G.....GG..GAG.....C..G.....					Mouse

HoxA5a:1

	46416	46426	46436	46446	46456	
46407:	TGGCTACGGCTACAACGGGATGGACCTAACAGTCGGTCGGACCAGTACCG					tilapia
18835:	C.....T.....G...G..G.....					striped_bass
44932:	...T.....T..A.....A...GA..G.....					pufferfish
53683:	..CT.GT.....T..A.....T..C.GCAC...G..ACT...CC...					zebrafish_a
74941:	C.....T.....T..C.GCA.TA...TC..AGCAT..TA					horn_shark
112512:	C.....T..C.....T..C.GC.....C..CT.GG..CT...					Human
108036:	C.....T..C.....T..C.GC.....C..TT.GG..T...					Mouse

HoxA5a:1

	46466	46473	46483	46493	46503	
46457:	GACACTTTGTG---GGAAGCGAGCGGACACCGGGCTACTCCCCGAGTCAC					tilapia
18885:	---C..A.....G..A.....					striped_bass
44982:	C..A.....A.....G..GC..A.....TGA..A.....					pufferfish
53733:	C..TTCATCTG..T.....A..T..AAA.....AAAGAC...CA					zebrafish_a
74991:	AC.....AAT---.CC..T..AA..AT..T..GAA.....TG..AGCAGCA					horn_shark
112562:	.C.....GC---TCCG..A.....CG..C..GCA.....G..TG..C..CGC..					Human
108086:	.C.....GC---TCCG.....CG..C..GCA.....G..GG..TG..GGC..					Mouse

HoxA5a:1

	46513	46523	46533	46538	
46504:	TCAGCGGCGACAACACCCGCGGTGGAGCCTG-----TCAG				tilapia
18932:	T.....G.....				striped_bass
45029:	..G...A..AG..G..CT..A..T-----T..G.....				pufferfish
53783:	A..T...A.....T..T-----C..				zebrafish_a
75038:	G..A..AA..AG..G..G..A...-A..GA..A..AAGCAGGAGCAGACAC...				horn_shark
112609:	AGC.....-----C.....				Human
108133:	AGT.....-----C.....				Mouse

HoxA5a:1

	46548	46558	46568	46578	46588	
46539:	GTACAACCAGTCCGCAAGCAGCACCGGGAACCTCGTCTCTATCGCCTCCAC					tilapia
18967:	C.....C..A.....CA.....A.....					striped_bass
45061:	A..GA...A..C.....CG.....T.....A.....					pufferfish
53800:	T...C..G..T---T..C..G..TA..C..G..G..T-----GAA...T..CT					zebrafish_a
75085:	AC..T.....CAT.....T...T...					horn_shark
112632:	G...C..G.....CGT..AC..C.....T...AG..					Human
108156:	G...C..G.....CGT..AC..C.....A..G..					Mouse

HoxA5a:1

	46598	46608	46618	46627	46637	
46589:	CTGACTCTCTACCGTGCTCCTCGGTCGCCAGCTCGTCC-CCAGTGACCGA					tilapia
19017:	C.A.....T.....G..C.....					striped_bass
45111:	C.G..G.....T.....GT.....G.....C..C.....					pufferfish
53841:	...TCA...C..C....A..CT.A...A...TC.TGT.....G.A-					zebrafish_a
75117:	C....G..C.....G.C..G.T...TC...TG.TG.C...AA-					horn_shark
112670:	.C..TC.G..G..C.....G.C..G...CC....C..GG...C...A-					Human
108194:	.C...C.G..G..C.....AG....G...CC....C..GG...C...A-					Mouse

HoxA5a:1

	46647	46657	46667	46676	46686	
46638:	GACACAGTCTCAGCACAGAGCTGTGAAAACTCCATAA-CGACCCCGTGC					tilapia
19066:	...T..A....A...C....C.....T.....					striped_bass
45160:	...C..AC.C.....C...T.....TG.C.-.A.....					pufferfish
53890:	-----GTCA...C.C..CC.....T...AC..TCTAG.A....					zebrafish_a
75166:	-----C..C...G---AA.C.....G-.A.G...A---					horn_shark
112719:	-----C..C...G---C.G.....C...G.A..T..A---					Human
108243:	-----C..C...G---C.G.....C.GGG.A..T..A---					Mouse

HoxA5a:1

	46696	46706	46712	46722	46732	
46687:	TCAACCCCGTGCTCAAATC-----GAACGGAGCCACGCTGCTGCTCAGCC					tilapia
19115:	G.G.....G.....A..					striped_bass
45206:	-----T..G.G.....C.G.....G...AT....G...A..					pufferfish
53928:	CTGG.T.T.C.TC...AG.TTTG.....T.....					zebrafish_a
75200:	---.TA.C.C.....T-----C.G.A.CAG..GCAGT.ACA...TA					horn_shark
112754:	G.GG.G..TC.GC.G.CGC-----GCA.C.C...A----.CAG...A					Human
108278:	G.GG.G..TC.GC..CGC-----GCA.C.C...A----.CAG...A					Mouse

HoxA5a:1

	46742	46752	46759	46769	46779	
46733:	GGGACTGTGTGTCCAAAGCTTC---CCCTCTGGAGGAAGAGAAGCCCGCG					tilapia
19161:	C.....C..C.....T...					striped_bass
45243:	C.C...A...T.C.---A..C..C.....G.....					pufferfish
53967:	...GG.A..T..G...TG..AAG.T..A.....A....AC..					zebrafish_a
75243:	.A..TG.G..TGG..CGT.GC---TGG.ACT....T..C.CC..G..A					horn_shark
112796:	.A..GG.G..TGG..CG..G....GGAGCC....G..CGCC..T..C					Human
108320:	.A..GG.G..TGG..CG..G....G.AGCC....G..CGCC..T..C					Mouse

HoxA5a:1

	46789	46799	46809	46819	
46780:	GGAAGTGCACCGACAACCTCAAAATGTAACCGACTCAACA-----				tilapia
19208:	C.....C.G.....				striped_bass
45290:	...G.C-----C.....C.A.....G-----				pufferfish
54017:	..T...G..A...G..T.A..G...GT.G..GG..C.G-----				zebrafish_a
75290:	A.C..C.AC..TC...G.T.A..G..C.GGCAAAG.A..G..CAACAG--				horn_shark
112843:	A.C..C.AG.A.G.G.G.G.G..G.GC.AGC.GAG.C.GG.GCCGCCCGC				Human
108367:	A.C..C.AG.A.G.GGCG.C..G.GC.AGC.GAG.C.GG.GCCGCCCGC				Mouse

HoxA5a:1

46830 46840 46850 46860 46870

46822: -CAGCCTCAGATATACCCGTGGATGAGAAACTACACATAAGTCACG**GT**A
19250:T.....G...G...T...A...T...
45326:A.....G...A.C...T...C...C...
54059:T..T..A.....C.....T..T.....T...
75338:T...C.....C.....G.....
112893: C..A..C.....C.....C.....C.C..G..G.....T...
108417: T....C....C....C....C....C.C..G..G....T.....

tilapia
striped_bass
pufferfish
zebrafish_a
horn_shark
Human
Mouse

46877 46887 46897 46906

46871: AACTGC-----TTTGTTTAATGACTTCGTACTGATTTT-GAT
19299:T.-----TTT.C.T.G.....TC.T...T.....A..C
45375:T.-----C...T...T...TC..T.GT.AGC...T..A
54102: ...G..AAACGTAGAGGTT.GCT...T..CG..T..GT.CT-----G
75387: ..A.C.-----C.CC.C.CT.AT...T.C.T.A..G----G
112943: ..
108467: ..

tilapia
striped_bass
pufferfish
zebrafish_a
horn_shark
Human
Mouse

46922 46934

46907: CTTTTGT-----AAAAAACAAAAAGCT-----GTTGTC
19339: ACC...C-----C...G
45413: ACC..TC-----GCTGC.
54147: TG..AA.-----GT..GGTGTG-----A...G.
47413: ..T.....AACATTTT...T..
75421: .CC.AAATTACTCTGGATGTTGC...T....C...AAATATACAC.C.A

tilapia
striped_bass
pufferfish
zebrafish_a
zebrafish_b
horn_shark

46952 46965 46975

46935: TGA CTGTTT--GTTTAAAAAAAAG-----AAAGAGAGAAAAGGGACG
19352: .T.T.....GTG.....
42279:T..G....CA-----A...AT...
54170: CTC...CCA--...T.C.GT...ATTTTTTTT..CTTTAT.TGAAT.-T
47439: GT.....TCA..A.....A-----AGTTAT..GA.
75471: ATG..CC..-----A-----T.TCTCT.T.....

tilapia
striped_bass
pufferfish
zebrafish_a
zebrafish_b
horn_shark

47003 47006

46976: TGGGATCAT-----CTTATTTAG-GACATTTTAT-----GAG
19369: ..T.....GTTTATAG..C...C..T...T...ACTATCAGA.A
54217: ..AA..AT.AGAGTTAGTTTT.C...T.-.T...ATA---TCGA.A
75494: C.TC.....A-----

tilapia
striped_bass
zebrafish_a
horn_shark

47016 47023 47033 47043

47007: CACAAGCCAAAT-----TTTGGCCATTCTGGCGTTAAAGTGA
19416: A..TG.T.....GCA.T..ATGATATA..T.TC.G
45459:ATGA...G.CAGCATTTTTTACA.....TA.TTCCCCC
54262: A.T.T.....ATGCATCCTGTGG...AATG.C..CATGT..CT.AA..
75509: -----G.....G.TATT..AT.....G

tilapia
striped_bass
pufferfish
zebrafish_a
horn_shark

47053 47071

47044: TAGAAAGAGCACAAATAA-----ACGTAGTTTTGGA-----
19453: --T...A.A..A...C.-AACAC-----GTT..C.C..TA-----
45483: -----ATGA...G.CAGCATTTTTTACA.....TA.TTCCCCC
54312: -----TTATTT.A..C.G-----TTA..T.C..TA-----
75528: -----CC-----T.G-----

tilapia
striped_bass
pufferfish
zebrafish_a
horn_shark

	47081	47091	47105	47115	
47075:	---AAAGGGGCATGTGGCGCTATGTGCA-----CCTCTCACCTGTTTGG				tilapia
19487:	-----A...A.....C..A...G-----A..				striped_bass
45526:	CTG.GG.TCT....ATTA.C.GA....GTTTGG.G.A.T.TAC....TA				pufferfish
54339:	-----AAA.G.A.....-A.TGTA..A..AA				zebrafish_a
75538:	-----T.GGG.A..T.-----TTAA.A.GG...C.A.				horn_shark

	47125	47135	47144	47154	
47116:	TTTATATTTGGTTAGCAAGACT-----ATCAGGTACGGGATAGT				tilapia
19526:	.G-----C.TT.C..T.CTGTC---AACATAG.C.....GA.				striped_bass
45576:	.-----G...CC..TTGCTGT.TTTGATTTTAC.CT-----G.CA.				pufferfish
54364:	.----.A..T..CG-----..T..				zebrafish_a
75569:	.-----CCTA.C..A..TG.-----AGAG				horn_shark

	47165	47173	47189	
47155:	GTAGCAACA-----GAT--GCGAGGTTAGACTA----GTAAATGT			tilapia
19567:	T..AT...TAACAAAAGAG.--TTA.....TTA.AATG..ATT.CA.			striped_bass
45613:	TA.AT.T..-----CGCGAGA--TTT.C...AGAA.-----A.			pufferfish
54380:	.G.TT..T.-----A..TG.TTGT...TTAA.-----AA			zebrafish_a
75591:	TA.AT..G.-----AT.--AT..A..GA.AA.---G..GTGG.T.			horn_shark

	47196	47206	47212	47219	47229	
47190:	ATTTGA---CCTTTTCTACAC-----TTGATAT---TTACTAAATGTGCG					tilapia
19615:	..					striped_bass
21947:	ATGC.....TA...AA..T.					striped_bass
45646:	CGTA.G..CC.G.T...GTCGC...G.CCCCC.T.TTTAAC.TT					pufferfish
54411:	A.A..T.-----					zebrafish_a
75627:	...ATGGGT.AGC...GCC..AATGCA.					horn_shark
82981:	.					horn_shark

	47239	47249	47259	47269	47279	
47230:	TTTTAAAATGGTTTTAAATAAAACGAGGATACTTAAAATATTTTTTGCTA					tilapia
19658:	.T.TGGT.A..C.GCCC.C..T.ACA.CAT.T					striped_bass
21972:	.AAA.....T...					striped_bass
45696:	..CGGGTG.TCA..C.TT.CTG.AA..T.C.G.....					pufferfish
54422:	..AG.G.-----T.TG..AA.AA..G..G.....AA.G..ATGC					zebrafish_a
49388:	AT...T.GTA...C..T.A....T..					zebrafish_b
82982:	..CA.....T.GC...TCT...GC...TC.T.....CG...					horn_shark

	47282	47292	47302	47312	47314	
47280:	T-----TAACCCCTTTCTATGGACTCAGTAGTAAAAGT-----G					tilapia
19690:	.ACCGTGT...TT..TC.C.GCAAC.TG..A.G.A...G..					striped_bass
45734:	-----G..A.GT...A.TT.TC.....					pufferfish
54465:	-----TT..G.CC.T..GAG.A.GT..CGCA.-----					zebrafish_a
49425:	.					zebrafish_b
75696:	GT..T..GGGA.TAGGAAGA.					horn_shark

	47325	47335	47345	
47315:	TGTG-----GTACCTTGTTACTTGTAAGTTTTAACCATTCAAGC--			tilapia
19732:	TCTC.TT.....A...TGT.....TG...TTG.---			striped_bass
45757:	CACA-----TAATGA...G..A..GTGT...T..AACT			pufferfish
54494:	C..T-----G....G.TG...A..T..T-			zebrafish_a
75717:	C.CAGAGGTTAGC...GA.ATGC.TGG.CT..C...CGGTC...TG----			horn_shark

	47358	47368	47374	
47354:	-----TCTACAAGGTGCCAG-----TCGTGTGGCAGC-----			tilapia
19772:	-----GT.CT.TTTAAG..ACATTTAAACTTTC....T.AC..A.-----			striped_bass
45793:	TACTAA..TA.CTT..G...-----C.GA.T..CTCA.AAAT			pufferfish
54518:	-----A..T..GTTCA.T-----			zebrafish_a
75763:	-----CT.T..GTTT.C.T-----T.GA...ATTT-----			horn_shark

	47386	47396	47406	47416	47426	
47381:	----GATTAAGACATTTCATACCTATAATATTACCAAACACAAGATTGTAA					tilapia
19813:	-----T...C.C.....C.....C.GA.ACCAT.T.GG...T..AAA.G					striped_bass
45830:	GACAAT..G					pufferfish
44102:	.T.C.....GA.A....G					pufferfish
54531:	----TT..GT.T.G.G.....AGGTG.....AA.TG..T..T.A-----					zebrafish_a
75787:	----AT.A.T.TAT.....TTCG-----A.TGT..GGATA-----					horn_shark

	47436	47446	47456	47465	47475	
47427:	AATTGAAAGAAACGTCTTCAAGAAAGTTGGCGCAA-AAGTAAAATTATTA					tilapia
19859:	..A.....T..AG..C.A.....TTT...C-.GA.GTTT.A.AC.					striped_bass
45888:	...AC..CCCA..C.					pufferfish
44120:	...CA.C....C.AGT.AA...CG...G....					pufferfish
54572:	-----AT..-...G...A.G.CC					zebrafish_a
75821:	-----CT..AC...GGAT.CG					horn_shark

HoxA5a:2
→

	47485	47495	47505	47515	
47476:	TTTAATTCTTCTGCGTCTGATCTGTTTTCTTTTTTGTGTGTACAAGA-				tilapia
19908:	-----..A.A.TA...C..G.....C.A..C.C..T.T.....-				striped_bass
45904:	-----ACC.CT...C.C..T.T.GT...-				pufferfish
54590:	-----CAC.CA...A..AC...T				zebrafish_a
75840:	-----.....G..TAC...C				horn_shark
109407:	C..T.T...TAC...C				Mouse

HoxA5a:2
→

	47532	47542	47552	47562	47572	
47525:	--TTTGTCTGGGCCAGAGGGGAAGCGGGCCAGAACTGCATACACTCGGTAA					tilapia
19951:	--...G.A..A..T..A.....A.A..G.....C..C..					striped_bass
45928:	--AC.T..C..A..G..A.....A.A.....G..G.....A....					pufferfish
54608:	AA...G.C..A..G.....AA..C....G..A..C.....G..C..					zebrafish_a
75859:	AG.A..GGA..A.....A..T..AA.A.....G..G..T.....C..A..					horn_shark
113911:	..C..G..A..C..AA.....C.G..G..C.....G..C..					Human
109423:	AA.A.AGG...C.....A..C..AA.....C.G..G..C.....C..					Mouse

HoxA5a:2
→

	47582	47592	47602	47612	47622	
47573:	CCAGACCCTCGAGCTGGAGAAGGAGTTCCACTTCAACCGGTACCTGACCC					tilapia
19999:	T.....G.....T.....					striped_bass
45976:	T.G.....T.....G.					pufferfish
54658:	A..T.....C.....A.....A.					zebrafish_a
75909:	G.....A..A..A.....TA.A.....					horn_shark
113952:	G.....T.....					Human
109473:	G.....A..A.....C.....					Mouse

HoxA5a:2
→

	47632	47642	47652	47662	47672	
47623:	GCAGGCGGAGGATCGAGATAGCCCATGCCCTCTGCCTCTCAGAGAGACAG					tilapia
20049:	.....					striped_bass
46026:	.....					pufferfish
54708:	.TC.C..A..A..T...T..A..CA.T..T..T.....A					zebrafish_a
75959:	.A..A..AC...A..A..T..A.....T..T.....A					horn_shark
114002:	...AA.....T..A....A.....T..T.....C.....A					Human
109523:	..C.AA.A.....A.....T.....T.....C.....A					Mouse

HoxA5a:2
→

	47682	47692	47702	47712	47722	
47673:	ATCAAAATCTGGTTTCAGAACCGAAGGATGAAGTGGAGAAGGACAACAA					tilapia
20099:	C.....					striped_bass
46076:	A.....C.....A.....					pufferfish
54758:	A.....A.....C..A.....A.....A..A.....					zebrafish_a
76009:	..T..G.....A..TA.G..A.....A.....A..A..T.....					horn_shark
114052:	..T.....C..A.....G..A.....A..A..T..T..					Human
109573:	..T.....C..A..A.G.....A..A..T..T..					Mouse

HoxA5a:2
→

	47732	47742	47752	47762	47772	
47723:	ACTAAAAAGCATGAGCATGGCGGCTGCAGGCGGAGGAGCCTATAGGCCCT					tilapia
20149:	G..G..G.....A.....G.....G.....C.....					striped_bass
46126:	G..G..G.....A.....T.....G.....T.....C.....T..					pufferfish
54808:	...G.....T...AT.....A.....AA.C....---.CC...T..					zebrafish_a
76059:	GT.....C.....A..C....---..C.T..A..					horn_shark
114102:	G..G.....C..G....---..G.....TCC.T...					Human
109623:	G..G.....T.....C..G....---..G..G..T.TCC.C...					Mouse

HoxA5a:2
→

	47782	47799	47809	47819	
47773:	GATTTTTTACACCTTTTAAAT---CCTGAAAAAAGAGCACTTCAAAATAAAA				tilapia
20199:	...A..C..T...C.CT.C---.CTG.T.GC.....TG				striped_bass
46176:	A..ACCCG.T..CC.CG.C---.CTG.TC.C.....TG				pufferfish
54855:	A.AA.G..T.TT.G.AT..TTA...CT.T...A				zebrafish_a
76106:	...				horn_shark
114149:	..G.A.CTG.G.G.....				Human
109670:	..				Mouse

	47829	47839	47849	47856	47866	
47820:	AAAGCAAAACAAAGATTGTCATATCAACTTCTC---CTCCTATTCCAAA					tilapia
20238:	...AT.....T.....					striped_bass
46215:	...AT...GG.....TGT..GT.G..T.CTG.					pufferfish
86661:	..T---...T..A...G.					Mouse

	47876	47892	47902	47912	
47867:	AAGCGCAGAGACTTAG----CGGGCTGTGTGAGAGAAGGGACAGAGGGGA				tilapia
20279:	A.....G.TTAA.....C.....TG....				striped_bass
46265:	..-..A.....TTGGAG.....T.....C.....AG.G..A..				pufferfish
86678:	G...A..C...T..				Mouse

47913:	G----	GGTCAGCCTATCTATAAACCTTCTGTATGTCCAACAAC-AGTCCC	tilapia
20320:	-----	A..C..C.C...C--G..CAG.....-C.....	striped_bass
46309:	.TTGA.ACA.CT.CCC...	A.....CCAAA.G.....G.....AC.....	pufferfish
47958:	-TTGTATTCC-----	TTAATATAATTTTCATTTTATCCCTACCGTGGTT	tilapia
20362:	A..A.....TTA----	T.....C.....TT.C.....	striped_bass
46359:	A..A..A...TCAACG.....	T...GTTC....C.T.AA.GT.AC.A.	pufferfish
48001:	ATGCTTATGTGAGT-AAAATGCATTATGTACAGTTCTGTCTAGATTTAGA	tilapia	
20409:	.....	A.....	striped_bass
46409:	G.....	---A.A.--....A...A.....C.....	pufferfish
48050:	AGATGAAAAAAGAGAC-----	ATGAAAATAAATGTTTGCTTAA	tilapia
20459:	G.....	G.A.C.....A.....T....	striped_bass
46450:	--.....	T.A.....C.....C..C...AATTC...	pufferfish
72248:	TGA.A..AACCGTTTGGAG....	C...C.....A.A.TT	Human
48088:	ATTATTTCTTGTTTCAGACGGGAAAAAAAACGTAAATAAAATAAAAGCTTG	tilapia	
20495:	.....	AA.....A.CG.C.....	striped_bass
46484:	G.....	CG.....GATTG.C.G.T....	pufferfish
72293:	..G.....	C.T....	Human
48138:	AAA---TGCTACCCGCCTAGCGCAAATAA---ATCCA-TATTTTCTGTGT	tilapia	
20541:	.....	---TG.TA...C.....G..AAAGT.....	striped_bass
46516:	...AAACA.....TA...GT...CC.C..AAT..TA.G..AAGGT.....	pufferfish	
48181:	GATGCACTC--AACAATAACAGCTTAATAAGTAGAAGGTTGAGGTTGAGC	tilapia	
20582:	.....	AG....C.....C..T...A....G....G...C...	striped_bass
46566:	A.....	-----TG..A...A..AC..CG....CA..CC...	pufferfish
55654:	.....	.C.....T.....T..TT.ATG.....A...	zebrafish_a
48229:	TACATTTGTGTTTGACCTTTCTTTTCTCTGTATGTACTGTATATGTATGT	tilapia	
20632:	.G.C.....	AG....CG....A.....	striped_bass
46608:	.G.C.....	AG.T.CC-----A.A....A....	pufferfish
52465:	.....	.A...A..T.A....A...A.	zebrafish_b
48279:	ATTTATTTGTTTGGTGTAT-TGTACCGAGTTGTCAGATAAAGTTGCTTCCA	tilapia	
20682:	.....	A.....-....A.C.....	striped_bass
46648:	.....	CTA....T..A..TA.C....G...A..-----	pufferfish
52487:	..A....AT..ATA.A...		zebrafish_b
48328:	AAAGTAGAACCCAGCAGTA-----AAAGCCTTGTGTGGTTATTGTATGTGT	tilapia	
20731:	.....	G.....AGTATGT.....G..C..	striped_bass
46694:	G.TT....G....G.GGTTTGT....G.....A.....G.AC..	pufferfish	

48373:	TGTGAACACACGTG--GACAAAGGTGCCGACTCACCTTGTATGTACAGT	tilapia
20781:	T..ATG....G..C.....GGT-----	striped_bass
46744:	TC-----A.....GGT..C.....	pufferfish
48421:	AGCTGTGCCTTGTATCTTTTTTTTTTTTTT-----TTTTTTTTTTTT	tilapia
20824:	G.....G...G..TGTTTGGGGG.....	striped_bass
46786:	C-----.....G..GC.	pufferfish
48461:	TTTTTGCAGGAGCTGCTTT-TATTCTCTTTCTTTCCTTATT-----ATT	tilapia
20874:	T-----C..G...CT.T...G...GT..G..TGGGGG..	striped_bass
46816:	G..G....T-----	pufferfish
48505:	TTATTATTATATATATTTTTTT-----CTTTTTGCGTTCTT	tilapia
20920:	..T..T..T.T.T.T.....TGCCAGGGGAGCTG..G.....G..	striped_bass
46826:	---..GCC.G.A..G..G....-----G.....TC.T..	pufferfish
48541:	C---ACCT-GGACGCAACATCTGAGTAAAAGCGTGTTTT-----	tilapia
20970:	TCAA....G..G...C..CATCTTT....AG..T...CTTTGTTCTTTG	striped_bass
46857:	-----CG.....CTC.....T...A...TATGTT-----	pufferfish
48576:	-----AGCTGTTTTT-----AGGGTCCCACCGTAAATCTT	tilapia
21020:	GTTTCCCAATA.....AATGTGGG-.....A.....TCC	striped_bass
46893:	-----..CCCACGAAGGA..AA.....GTT.C..G-CC	pufferfish
48606:	ATCGC--AATGTGTATTATCTCCATCGTGATAAGGTTTTTTTCTTTCTT	tilapia
21069:	..T..CT.....A.A.....G-----	striped_bass
46928:	..T.---C.C...TAA.G.G.A..T..T-----	pufferfish
48654:	TTTTTTTTTTTTTTTTTTGTAAATGTTTTTCAGAAGACTGGAAGTCAA--	tilapia
21099:	-----A..AGC.....-.....GA	striped_bass
46955:	-----GC...G.....-G.....GA	pufferfish
48702:	----ACTATAGTATGATAATAATAATGATGTTTCATGATGACGACGATGAT	tilapia
21141:	ATAT.....A.....G..G.....A.G.....T..T.....	striped_bass
46993:	ATATGT..C.-..A.....AT.T....C	pufferfish
48748:	GGCCAGAATAATAAACCTTTGTACTGGAACGGCAACACCTCACTGAGTGCA	tilapia
21189:	TT.....C.....TTA..G.....T.	striped_bass
47023:	TT.A.....C.....T.....T.AT.TCCCT..T.	pufferfish

	48807	48817	48827	48837	48847	
48798:	CGTTTTTGTCAAATCTTTCAGATGGATTTTTTCGTGTGTCAGGGCTGCTG					tilapia
21239:	A....A...AG...TC.....C.CTGTT.....					striped_bass
47073:	.T..A..T.A...AAC----A.CCCC.CCC.AAAA.CACGC.C....T..					pufferfish

	48857	48867	48877	48887	48897	
48848:	TTTTGAGGGGGGGGGGATTTTTGGGAGTTTTGCTGGTTAATCTAAAAATC					tilapia
21283:	CA.G..A.ACAACAA-----T..GG.....					striped_bass
47119:	.C.A..C.A.T.CA.-----C.....G..T..					pufferfish

	48907	48917	48927	48937	48947	
48898:	TTAAAGCCACTTGTATGAGCTCTCAGAAAAAAACAAGCTGGCAAAGTTT					tilapia
21319:	..TG..T.....G..GA.....T.....					striped_bass
47148:	G.....CA.....A...G...C					pufferfish

	48962	48972	48982	48992	
48948:	CCTCAAAT-----CTCTTTGAATTCAACAGGTCCTCTCGTATTAAAGCAT				tilapia
21360:	G.CAAAT...G.....CA.T.A..G...TT.				striped_bass
47169:	G.C.CT.....TA...TCA..G....T.				pufferfish

	49002	49012	49026	
48993:	CCAGTTTTACTCACCTTGCTCAGGCGCT-----GGGGTC			tilapia
21410:	.ATA.....GT..A....GGGGGGCTTTTG.....			striped_bass
47205:	TAT.CG.....TTT.A.A.GGGTGGAGTGATTTTG...C..			pufferfish

	49033	49039	49049	49059	49069	
49027:	CTTA---ACTGAC----TTCAGGGGCCGGGGTCCCCCTTTGCACACAG					tilapia
21456:	...GGAC.....GGGC.C..-.....C.....G.....					striped_bass
47255:	...GTCC...A..AGGC.C.....C.....G..T..					pufferfish

	49080	49090	49100	49110	
49070:	A-----CTATCCCAGAGAATTAGCTCGACTTTTCTTGCTGTAAAC				tilapia
21502:	.CTCCTGGG-.....G.....C.A.....AA.....				striped_bass
47302:	.CTCCACGGG...C.....AC.CT.....AC.....				pufferfish
55929:					zebrafish_a
77583:					horn_shark
115560:					Human
111075:					Mouse

	49119	49124	49134	49144	49154	
49111:	-TTTATTAGGGCCG-----TTTCTGGCTCTCTGACATTTGGGTGCTAAAT					tilapia
21551:	-.....A.....					striped_bass
47352:	-.....A.....G.....AC.....					pufferfish
55933:	-.....C...AC..TTTACCA.....A..CAC.....G.CTG.TA.G..					zebrafish_a
77588:	T.....ACACCT.A----G...C...T.A.....C....					horn_shark
115566:	-.....A..CC..A----G...C...A.A.....C....					Human
111081:	-.....A..CC..A----G...C...A.A.....C....					Mouse

	49162	49171	49181	49191	49201	
49155:	GAATG	--GGGGG	-TTTGTCT	ATGAATT	AGATCGT	AAAAATCATCCGGAGAT
21595:	.....	--T	.....	A	.....	C
47394:	.....	--T	.....		.....	C
55982:	A	..AAT	A.T.T	.G..	C.C	T...CT...CT
77633:	....	A--	...T--	.....	.....	AT..C
115610:	....	A--	...T--	.....	.....	AT..C
111125:	....	A--	...T--	.....	.....	AT..C

tilapia
striped_bass
pufferfish
zebrafish_a
horn_shark
Human
Mouse

	49209	49219	49228	49238	49248	
49202:	GCGGC	--CAGATAGGCTCACT	TGGCCAT	-AAACGGTCACGT	GGTAGCCATT	
21643:	.....	--	.....	-	.....	
47442:	.....	--	.....	-	.....	
56032:	.A.A	TG.....	T	..A	..A	..G..A..
77678:	A.A.A	--T	..C	T	..AAA	..-T.T
115655:	A.A.A	--	C	T	..AC	..-G
111170:	A.A.A	--	C.C	T	..AC	..-G

tilapia
striped_bass
pufferfish
zebrafish_a
horn_shark
Human
Mouse

	49258	49268		49281	49291	
49249:	AAAGTAAGTTTTATGGTTTTGGGGAGTTG	-----	ACAGTATATTGCAC			
21690:	.....	-----	.....			
47489:	.....	-----	.....			
56082:	....	C	C	-----	C	..G..T
77724:	.....		ACAACCA	.....	CT	
115701:	.....		ACATCCA	..T	..AC	
111216:	.....		ACATCCA	..T	..AC	

tilapia
striped_bass
pufferfish
zebrafish_a
horn_shark
Human
Mouse

	49301	49311	49321	49331	49341	
49292:	ATAACATATAATCGCACTGACGGCGAGGCTTCGTCTGACTCTCTCTTTGC					
21733:	.....					
47532:	.....	..T	..C	..C	CT	GA.T
56125:	....	AG.TA	.....	-T	GA	..T.TCT.TC---C..T
77774:	.....	T	TG	A	..A.T	..GT..C---
115751:	.....	T	..A	..TG	A	..C.A.T
111266:	.....	T	..A	..TG	A	..C.A.T

tilapia
striped_bass
pufferfish
zebrafish_a
horn_shark
Human
Mouse

	49349	49359	49369	49379	49389	
49342:	AGGCTGT	--AAGTGTTACTTGACC	GGTACAGACCAGCTCTATTGCTCAGT			
21783:	-	.....	C	GT	..G	.....
47582:	..C	.....	T	GT	TG	..T..
56171:	..A.C	..AG.G	T	T		
77820:	..AT	..C--GT	..			
115797:	.....	AC--GT	..CCG.C	..G	..	
111312:	.....	AC--GT	..C.G.C	..GT	..	

tilapia
striped_bass
pufferfish
zebrafish_a
horn_shark
Human
Mouse

	49399	49409	49419	49429	49439	
49390:	CTTGCCTCAGTATGGACCGGACGTTCTCCAGGATGGGGACCGCGTCTGTG					
21830:	..	.....	C	A	C	
47626:	..	A	A.C	T	A	GCCT

tilapia
striped_bass
pufferfish

	49449	49459	49469	49479	49489	
49440:	GGTAAGTTTCACCAGACTAGACGGTAGCTTGAGAACAGCCAGTCTGTGTT					
21879:	.....	TG	TC	CC	C	
47675:	.....	TG	A	TC	G	TCCA

tilapia
striped_bass
pufferfish

	49499	49509	49519	49529	49539	
49490:	AAACAGCCTT	ATTATTGTA	TCGCTCCCT	TATCCGTCCCT	TATTAGTCCA	tilapia
21929:	T.....	C.....	A.....	A.....	A.....	striped_bass
47725:	T.....	C.T..G.....	G..T....TC.....	AG..		pufferfish

	49549	49559	49568	49578	49588	
49540:	TTACACTAAT	TTTGTCAGTTG	-TGGAGTGCT	GAATACTGGT	CTCGGCAGAT	tilapia
21979:	T.....	C.....	A.....	A.....	A.....	striped_bass
47775:	G.....	-..CC.....	G..T....C.....	C.....		pufferfish

	49598	49608	49618	49628	49638	
49589:	GTTGCGCAGG	GTTGGGTCCAG	CTCATGGCT	ATTTAATTGCT	TCCTTCCCC	tilapia
22029:	G.....	G.....	TC.....	T..A		striped_bass
47824:	G.....	TC.....	T..A			pufferfish

	49648	49658	49668	49678	49688	
49639:	GTGTAAC	TGTTCCCTCC	ATCTGTGGT	GTAAC	CATAATCCAT	tilapia
22079:	G.....	G.....	G.....	G.....	G.....	striped_bass
47874:	A.A.....C.....	G.....	G.....	G.....	G.....	pufferfish

	49698	49706	49716	49726	49736	
49689:	ATCTTGGATA	AATTA--TCTGT	GTCATGTCC	ACCCCCACA	AACCTCAACT	tilapia
22129:	..G.....TC.....	T.....	T.....	T..T.G.	T..T.G.	striped_bass
47921:	T.G-----C.....	TC.....A.GT..T..T..G.....	T..TG.T.	T..TG.T.		pufferfish

	49745	49755	49765	49775	49785	
49737:	TGTTGTCG	-TTTTATTACA	TGGAGAAGT	CACAGAGCGT	GCGCCAGAAAG	tilapia
22179:	T.....	T.....	C..AAG-...A..--	A..--	A..--	striped_bass
47966:	A...A..CG.C..A..	-----T..A..T.	-----T..A..T.	-----T..A..T.	-----T..A..T.	pufferfish

	49795	49805	49814	49824	49834	
49786:	TTTCCAGGGG	GCTCGTGGAG	CGTGT-AGAT	TTTCCTTGATA	AAAGTTAAGGG	tilapia
22224:	-----TT....CTC.AA-----	T.C.....	C.....	C.....	C.....	striped_bass
47998:	AT-----	T....A...AGA.G...G.....	A.....	A.....	A.....	pufferfish

	49844	49854	49864	49869	
49835:	TTAATGCAGG	-----CCTACAGAT	TTACAGCTCGC	-----TTGAT	tilapia
22262:	CA.....A-----	A..TGCCT.....	A..TGCCT.....	A..TGCCT.....	striped_bass
48034:	A..GA.A..AGTTTTAGGCTTT..T.....	A.GGA.AA..ATTATC...C	A.GGA.AA..ATTATC...C	A.GGA.AA..ATTATC...C	pufferfish

	49879	49889	49899	49909	49919	
49870:	TGGATTCTGT	ATGTGCTGAT	GACTTCTGGA	ACTTGTGGGT	CCATCGCTAA	tilapia
22299:	T.....	G....A...T..C..CT.G-	G....A...T..C..CT.G-	G....A...T..C..CT.G-	G....A...T..C..CT.G-	striped_bass
48084:	C.A...GAT...T.A.....	-----CGT.G.....	-----CGT.G.....	-----CGT.G.....	-----CGT.G.....	pufferfish

	49929	49939	49949	49959	49969	
49920:	AACAAAAGTT	GCAGTTGTTCT	GCTGAGCGCT	GCATGCGCGC	CACATGTTG	tilapia
22348:	---.A.....T..G.....	-----T.....	-----T.....	-----T.....	-----T.....	striped_bass
48122:	---.CT.AAG..GA..TACT.C.AA.AT..	-----AATT.....C..	-----AATT.....C..	-----AATT.....C..	-----AATT.....C..	pufferfish

	49979	49989	49999	50009	50019	
49970:	GCACGGTATATGGCTTTAGGGCAGGCTGTAAACAGTGTCAAGTAAACACA					tilapia
22391:	...CA.-----A....A.....					striped_bass
48165:	...GC..G.TCA.GA.....T...A.C.....G.....A.					pufferfish

	50029	50039	50045	50054	50064	
50020:	ACAAGGGAAGAAACAACAGC---- <td></td> <td></td> <td></td> <td></td> <td>tilapia</td>					tilapia
22436:	...T.....C.....G.....G..T...G.....					striped_bass
48215:	...T...G.C.....TTCGGA.C.G..T...A.....					pufferfish

	50074		50091	50101	
50065:	TTTTGTGTCAACCAAGTC-----GGTTGAAAACCTTCAGATGA				tilapia
22482:	TG...C...GTTTTGTGTTTGG.....G....A....				striped_bass
48265:	A.....TGT..C..TGTTTTGTGTTTGA.....G.G.....				pufferfish

	50111	50121	50131	50141	50151	
50102:	CCTCTTAAAAGTCACTCTCGCTTTGTGGTGACCTTTTGTCCGAGCAGAGT					tilapia
22532:	...T.C.....A.....A.C.....CT..AT.-					striped_bass
48315:	..C.GCC.....C.G.A.....C...C...GT...TAC					pufferfish

	50161	50171	50181	50191	50201	
50152:	CGGGGCCAAACGGGTCACTAGTGGACACAGACTTACAGAAACATGATCTG					tilapia
22581:	G.....T...C...A.ACT...C.CTGAG.C..A...-...CA...					striped_bass
48365:	-----C..C.TGC.....					pufferfish
46573:	...A..A.G..AC.....A.AA.A					pufferfish

	50210	50220	50230	50235	
50202:	AAAA-TGAAAGTGTAACCTGTATATTGTTT-----ATTATTTTT-----				tilapia
22630:	G...T....A.TA...TGA....G.T...GG---C..A...CTCACAA				striped_bass
46597:	T..TT.TGG.A.TGGC.TA...CTG...A.TGTAA...TA.....				pufferfish

	50249	50259	50269	50286	
50240:	TTTCTGTGGAAGAAGTGGTCTCATTTTTTACATTTTTTT---TCTTTTCCC				tilapia
22677:	.A.T.T....CAC.T...C.CTT.C...TTC.....AAA..A...TTA				striped_bass
46641:	.A.TC..AA..A..				pufferfish
77198:	C.----.TA...TT.				Human

	50296	50306	50316	50326	50334	
50287:	GCACTACAGGATGTGCTACTGGATGCGCGCCTTCTCTTCG--TTGAAATT					tilapia
22727:	T..T...-..AG....TGTG.C...A...-..GCT....AT-----					striped_bass
48413:	TT..AT....					pufferfish
77222:	C..T.					Human

	50341	50351	50361	50371	50381	
50335:	TTCGGT---GCAAATACGCACGAAATCGACTAAAACGAAAATATTTTGA					tilapia
22773:	.C.A.A---C.....T.....AGAT..TT..TAA...CGGA.A.C.					striped_bass
48429:	.GTA..AGGC.....T.G.GA.C..T.G.CT.-----					pufferfish

	50391	50401	50411	50421	50431	
50382:	TCTTATAAGTCTTATCATGTTTTGCCAGCCAAAAAAGTTGCTGAATGTCT					tilapia
22820:	C.A.TAG....G...G.-.....G...AA....C..CCTGCA...AA.C					striped_bass
48462:	-----T.....-T.GG..T...AA.G.G.GT...-CAG..AA--					pufferfish

	50441	50451	50461	50471	50481	
50432:	CGTGAAC	TTTGT	TGAAT	TTGTT	GATT	CAGCGGGTTTTCAAAGGTCATGCT
22869:	AT.CCGT	.T.AA.G	....	-..CC.GC	A	T.CAT.
48498:	-----	.ACACAA	.....	-----	AA..T	.AGT.CATC

tilapia
striped_bass
pufferfish

	50491	50501	50511	50521	50531	
50482:	GTCCGCCAGT	CTGAATAAT	TTAAACATCAAAGTTTCTCTGTTTTGTGCA			
22918:	.....	CAATC	C	-----	C...G	TAT-----CG
48526:	A.GA	.AG	.T.A	.....	-----	A..G.A--.A..CA.A.

tilapia
striped_bass
pufferfish

	50538	50548	50558	50565	50574	
50532:	GAGGC	---CTTCATCAT	TTTTTTTTTAAATTCATC	---GGTGAATTCT	-GAA	
22962:	.....	---A	CAC.G.C	AG.AC	TAAA	T.T
48564:	..TA	.GTGT	.AG	.T.GA	..GG	.AGT.A..CG-----T.T...T..
85311:			T	CT	---GA	.....

tilapia
striped_bass
pufferfish
Human

	50584	50594	50604	50614	50624	
50575:	CCTTATGACACG	AAAAACAAATATTTATATCGTCAAATGAC	TTTAAATAGT			
23008:	G...TCTG	.AAT	.T.T	.G.A.T	..TAG	.GT.GA.....
48608:	TCTGT	.AC	..G	---G.G.G.G	..AAG	G-----

tilapia
striped_bass
pufferfish

	50634	50644	50654	50660	50670	
50625:	TTATACTTTAGT	TATATGTTACCAATGCTGGGAGG	---CATTTAAAATC			
23050:	-----A	.A.A	.CC	.T.C	.G...C	AA.T.ATCA.C.....AA
48643:	-----T	.G	.A.G	-----	G...AA	.CAGCCATCA..G...AA

tilapia
striped_bass
pufferfish

	50680	50690	50700	50708	50718	
50671:	TTGGCACCTTT	AAAAAGTGTCATGGATTGCTTAAA	--TTGATTTGATTTCT			
23095:	.A	.AT-T	.GG	.C.GACAAGG	A.T	..CC.CT.....T
48683:	.A	---T	-----	ACAG	..A	-----T..C--G...
53694:						...T.

tilapia
striped_bass
pufferfish
zebrafish_a

	50728	50738	50748	50758	50768	
50719:	TCTCATAATTATCGTCATCATCATCAGTATTATCAAGAAATCCGAAAAT					
23144:	..CTG	.TT	AAC	AT	..G	
48709:	.T	TGC	-----AAT	.GT	.A.ACG	.TCA.
53699:	.TCT	.T	TA	T	.T	..T

tilapia
striped_bass
pufferfish
zebrafish_a

	50778	50783				
50769:	CGGCATTTGCA	-----TTTCGTTCTCTC	-----AATCC			
23174:	TT	.AGG	CCGAT	.G	A	.CAGAAT....AAACCGCATTG
48739:	TT	.G	.ACCA	.GGGA	-----A	-----C

tilapia
striped_bass
pufferfish

	50806	50816	50826	50836	
50797:	-----TTGATG	CAGTGCTTTGCGAGTTTTTATTACGCGTGTGTAA			
23224:	CTTACATCCT	.CAG	.TT	.T	AA
48762:	-----AGGTTGT	A	.A	-----T	.G

tilapia
striped_bass
pufferfish

	50846	50856	50866	50876	50886	
50837:	AGTAGACGCCAGCCTAACAGAAACACAAATTTATACTCTTTCCAGTTTGA					
23274:	..AT	.T	.T	.CT	.T	T
48786:	.AG	.A	.TT	.T	.GG	.GGGG....TG...G.C.GAGTA.CAATT.A...A-

tilapia
striped_bass
pufferfish

	50895	50905	50914	50922	50932	
50887:	-TTTGAGAC	AATTGAAAAT	AAAACAGG	-ACGGGGTG	-GAGGAAGGCTG	tilapia
23323:	T...T...AGC	.C.A.G....C.....	-G..CAC..-A..ATGC...	A		striped_bass
48835:	-----	A.G..C...GT.TTT...	C.T.AATAT.TGCA.T.A			pufferfish
59221:		..G..A.....	---C.....TT..TGA			zebrafish_a
91257:		G...G.....	-A..A.CA--A.....A.			Human

	50942	50952	50962	50971	50981	
50933:	TTTGGAAT	TAAAAATC	TTGCCAAT	ATTTCAAAGGAG	-ATATTTTCGACA	tilapia
23371:	G....C.T.....	-A.....				striped_bass
48871:	...CCG.G-GG...	C.....GT.....	AC..T...G....			pufferfish
59251:	G.G...TT.....					zebrafish_a

	50991	50998	51008	51018	51028	
50982:	GGGCCCCATG	TGCGG---	CATACTGCCAGG	CAGAGAAAGAGAGAGAGAG		tilapia
23420:	.....	---TC.....	G.....			striped_bass
48920:	.A.....	GGTTC.C.....	A.....	CGCGCT		pufferfish
57477:			.A...AT.ATA..G.G....	G..CT		zebrafish_a

	51035	51045	51055	51065	51075	
51029:	GAAAG---	AGGGGAGCGCAGCAG	GTTCATCTGGAGGTCAGCCACAGCAC			tilapia
23467:	..G..-AA..A.AG.A..T.T.....					striped_bass
48970:	.C.GA-----	G.....	T.TC.G....G			pufferfish
57503:	...GAAAA.T.TCTT...TC.T.....	C.GT.....	TGG.G...GG			zebrafish_a

	51085	51095	51105	51115	51125	
51076:	AAGATAAATCTGCATCCTCTCTGAGCCACCAGCAGAGCTCGCTTTAGGCC					tilapia
23516:	T...A.....					striped_bass
49003:	A.....					pufferfish
57553:	G...G....CA.G.CA.A.A.....T...					zebrafish_a
81950:	..A..GC.....CA...GC..CT.....A..					horn_shark
119373:	CA.C..AG..AT.G.....A.....TA.					Human
114747:	CA.C..AG..AT.G.....TA.					Mouse

	51135		51146	51156	
51126:	AAGTTCACTGTCAACCTGC	-----	TGCATAGAGAG		tilapia
23566:	.....	-----	T.....		striped_bass
49053:	CA.	-----	G.....		pufferfish
57603:	G.....	ATTGGCGCCCCTTTCTTTTA	.G....A.A-		zebrafish_a
82000:	A...TAT..TATTAGCA-----	G.CT.G...-			horn_shark
119423:	A....				Human
114797:	A....A.TG..				Mouse

	51166	51176	
51157:	GAGGAAAAAAACCACACTGGCACATCCGC-----		tilapia
23596:	-----GGG.AAC.G..CA.....A.GGTACCGCGCGCATACACACA		striped_bass
49083:	-----C.TT..CG..T-----		pufferfish
57651:	-TA...G..TAATA...CC.G.G.A.A-----		zebrafish_a
84968:	CA.A-----ACACA		zebrafish_b
82037:	-----CA.G....ATTGTTCTATCAGTGCA-ACAGA		horn_shark
88888:	.G.C...TTT.CA....CG...-----		Mouse

	51194	51204	
51186:	-GGTAGCGCGCACACGCACACACTCAC-----		tilapia
23640:	CACACA.A.A.....A.....A...ACACACACACACACACACAAG		striped_bass
49094:	-----TTTA.T.-...G..GT.TT-----		pufferfish
57679:	-----TTTA.T.-...G..GT.TT-----		zebrafish_a
84982:	CACACA.A.A.....A.....A...ACACACACACACACACACAAG		zebrafish_b
82070:	AAAGGA..GAA.T.TTA.A.TGGA.T-----		horn_shark
88910:	-.CGC.....A.....A...		Mouse

	51215	51223	51232	51242	
51212:	-----GTTAAT--GACACGTTTGC-TTGGC-----				tilapia
23690:	TTCACC.....A-----				striped_bass
49105:	-----TG..A.T-----				pufferfish
57699:	-----A..G--A.T.TACG..G..CA-----				zebrafish_a
85009:	-----ACA..CA-C...AC..C.-GAT.ACTCAACTAG...ATT..C				zebrafish_b
82097:	-----A.A.GCTTA.TG....TT-...T---TTGCTATAC.ATT...				horn_shark

	51252	51262	51272	51282	
51243:	AAGCATAATGCGTAAAAATGAAATTACCA-----				tilapia
23727:	C..A.--.....T....G-----				striped_bass
49135:	TC..A.....ACG....-T..TTGGGAAACAGA..AAC...				pufferfish
57728:	..TA..GC...G...TC.G.AG...C--T-----				zebrafish_a
85051:	..ATG...TTAC....CC.C.A.G.A..				zebrafish_b
82137:	..TTGC.TC.GC.GGC.G.TGC.G.-----				horn_shark

	51290	51299	51309	51319	51327	
51283:	GCCTG--TGGAATATCC-TGCACGAGAGGAAAAGACTGC--					tilapia
23765:	C.....C.....T--..A.GAG.G					striped_bass
49183:	A...A--TT..GC...G..T.G					pufferfish
49876:	AG.....GA...A.....G					pufferfish
57766:	A.A.A--CAT.....AT.TC..GCC....G....CTGTAG..					zebrafish_a
82166:	A.T.ACCAC...GCATA.C..ACTA.AT.....GCA.TT.A.TA..C					horn_shark

	51337	51347	51357	51366	51376	
51328:	AGTGGGAGGAAAACCTGCACTGTTGCCTTCA-ACAAAGACTTTTGGCTGC					tilapia
23810:	..G.....T.T....TA.....C-----					striped_bass
49253:	T.TCC...G.....T.					pufferfish
49900:	..A.A..AA..G.G.CTGG...					pufferfish
57802:	A..TA--T..AATAA..T.TT..T.G....A.C--					zebrafish_a
82216:	C...AGA..-GTTG..GT.CA..C.ATT					horn_shark

	51386	51394	51404	51414	51424	
51377:	TGTGGTTGCTC--TAACACTAATGAGTGATTTGCATATTTACGGCCCTA					tilapia
23859:	.T.....TA...G.....A.....T...					striped_bass
49279:	.T-----A..A.A....GA.A...T.GT.....A..TT.C					pufferfish
57838:	T.....					zebrafish_a
82246:	.T-----G.G.T...A...AG...C.....					horn_shark

	51434	51444	51463	
51425:	TTAGTCTTGAGTGGGAGCCCGCCGATTT-----ATC-----			tilapia
23909:	AT.....TTTTCA..C.C..			striped_bass
49319:	..T....A...T...T..TATG.....TTTGC..T-----			pufferfish
57850:	-----A.T..AAG.TATAAATA..A-----			zebrafish_a
82270:	-----C..G..AG.GTG.GG...CGG-----			horn_shark

	51473	51483	51493	51503	51513	
51464:	TTTGGGAAC	ATCACAAAGCT	ACAATTGCA	TTTAGATCT	TGTGCTGGCA	tilapia
23952:	G...A.....T.....	-T.....				striped_bass
49363:	C.CCC.G.A.A..C.G-	T.....TAG..T.TAT..T.CT..CTGC				pufferfish
57876:	-----G.A.A.GA-					zebrafish_a
82299:	G.G...GTGGA.GAG.	-----GGGGA.G.GGACG...ACTT..G				horn_shark

	51522	51532	51538	51548	51558	
51514:	CTTCGC-TGCTTCTAAAAT	TTTTTGA----	CAATGATCAT	TGTGATGGCA		tilapia
24001:	T.-AA..A.G.....GG.-----A.....CC.....A					striped_bass
49412:	A...C.T.AA..A.G..T....C.GGGTGA.....G..C....T...A					pufferfish
57886:	-----CAG.GT.G...CGAAA.T-----					zebrafish_a
82340:	.A.TC.-CAGAC..G.....AGCAGTACATC....AA..A....AC.A.A					horn_shark

	51568	51578	51588	51598	51608	
51559:	GAGATGTAGACATTGTTAAATCAT	TTTTTTTTTCGTTTCAAAGGGTATGG				tilapia
24046:	GA..C.....-AA.....GA.-----					striped_bass
49462:	GA.GC.A..C-----					pufferfish
57922:	-----T...GTCC...TG...A...GT.....					zebrafish_a
82389:	.G.GA-----					horn_shark

	51618	51628	51638	51648	51658	
51609:	AGGGATGCGCGGGGGGGTATCTCACTGGGCTGGGGCT	GATGAGAGCGAGA				tilapia
24090:	-----CCA.A.....C.....A.A.....G...					striped_bass
49497:	-----ACAAA..A..T.AATAAC.A..A.....C...-T.					pufferfish
57950:	-----T.....AA.---					zebrafish_a
82415:	-----...TTT.AAAAAAGG...C...TA.G.T..T..G...G...GT.					horn_shark
119808:						Human
115179:						Mouse

	51677	51686	51696	51706	
51659:	TAGCTGCAG-AAGAGGAGGAAAAATTG-GGGTCAAAAGTTTACGCGCTGA				tilapia
24129:	C....A.....				striped_bass
49533:	..T....A-CG.....				pufferfish
57964:	-..TCTT.A-.G.TA.G..G.GG..C.-A.....AA-..A..				zebrafish_a
82459:	C.A...T.....TCA...G...A.....TTT..C				horn_shark
119821:	C.A.....TCA...G...A.....ATTG..C				Human
115193:	C.A.....TCA...G...A.....ATTG..C				Mouse

	51716	51726	51736	51746	51756	
51707:	ACAACCTCTCCGTCATCTGTTCACTCGGAGCCTGATGCCAGCCTTATAATA					tilapia
24178:	G.....T.....					striped_bass
49581:	G.....T.....T.....					pufferfish
58010:	G.AG.T.....TTGTA...GCAG....CTT.....					zebrafish_a
82503:	..G...TGTA...C...GA.A..TT...T..ATG....GC-					horn_shark
119865:	.GTG...TA.....CC..GA.A..TT...T..ATG...G.GCT					Human
115237:	.GC....TA.....CC..GA.A..TT...T..ATT.CG-.GCT					Mouse

	51766	51776	51786	51796	51806	
51757:	GCGATCTTGACTCTCCACACAAAAGACAGAATAGCTTTGCATTACATATG					tilapia
24228:	G.....A.....					striped_bass
49631:	A.....					pufferfish
58059:	-----GG.....TG.....G..A..CC.G.GA.					zebrafish_a
82552:	A..AG.....T.A.....AG....TCG..					horn_shark
119915:	.T.....A..AG.....T.A...G...CA.AG.G..GCG..					Human
115286:	A..AC.....T.A...G...CG.AG.G..GCG..					Mouse

	51824	51834	51844	51854	
51807:	TTGCATGG	--TGC	ACTCCAGGTGA	ACCCTGGATGCGCAGT	GACCTCGCGT
24278:	C	----	A	A.....G	.....
49678:	...G	CT--	A	G	.....
58094:	..C--	..TC	AAC...GC	A.....C	A..TGG.....CTAG..
82602:	.AT...	ACTA..G	GA	CGA.TG.AC	.....
119965:	.AT..C	..TA..G	A	TG.TTG.A	.....
115336:	.AT..C	..TG..G	TG	TTG.A	.....

tilapia
 striped_bass
 pufferfish
 zebrafish_a
 horn_shark
 Human
 Mouse

	51864	51874	51884	51890	51900	
51855:	TTGAAACCGGGGGAGGAGAC	CCCCCACCCG	TCC----	CCAGCAACAAGAT		
24326:	...GG	G	.....	-----	.....	
49726:	...G	A	G.....G	-----	.....	
58142:	.A.C.T.	----C	A.....TA..T..T	CG..AATT	.....	

tilapia
 striped_bass
 pufferfish
 zebrafish_a

	51910	51920	51930	51940	51950	
51901:	TGAGTGGTTGGCGTTTTAT	TAGGGCGGCTGATTGGTGAAT	TTTCCTTTGAA			
24372:	C	T	.....	.....	.....	
49772:	C	C.....T	.....	.....	.....	
58183:	C....AT	C-CTT.....A	..GATT.....C	.....	.....	

tilapia
 striped_bass
 pufferfish
 zebrafish_a

	51960	51970	51976	51986	51996	
51951:	TAAATTGCA	TTTGATATGTTTG	----GGGACGAGGGCAAA	ATTAGCATTT		
24422:	.....	.....ACGA	GA	C	T	
49822:	G	A	----	G	.....	
58232:	A	T.....	.....	.....	.....	

tilapia
 striped_bass
 pufferfish
 zebrafish_a

	52006	52016	52026	52036	52045	
51997:	TGAGGATTG	ATACTCTCGACCCG	GTACAGGGTAATGCGA	AAGGCC	-TCG	
24472:	.....	.....	.....G	.....	--A	
49868:	T	.....	.....A	G.....	AGA.	

tilapia
 striped_bass
 pufferfish

	52055	52065	52075	52085	52095	
52046:	TCCCCCAAAATGAGCCCCCG	GATCCCTTAAAAAACATTTAGCCCCACTCT				
24520:	G.....T	C	T	.....	.....	
49918:	A.....G	..T..C	T	.....	.....	

tilapia
 striped_bass
 pufferfish

	52105	52115	52124	52134	52144	
52096:	TCCTGATCA	ACTGAATAGAAGCC	-TTTAAAAAACTGAAATGGCACAGAT			
24570:	G	T	G	A.....G	.....	
49968:	T	.....	.....G	AA.....G	A.....	

tilapia
 striped_bass
 pufferfish

	52151	52161	52178	52188	
52145:	GTT---	GCGCCTCATAAATAGACCGGCT---	TAATATATATATAGATATA		
24620:	...TTT	T.A..TGC.G.G...AA	TT.ATAA..C..T..T	GTGG.A.	
50016:	...				
59517:			T	.....	
52514:			T	.....	

tilapia
 striped_bass
 pufferfish
 zebrafish_a
 zebrafish_b

	52195	52205	52215	52225	52235	
52189:	TAGT---	ATCAATATATTGTAGTTTTGAGGTTT	TTTTTCATAAGGTCTA			
24670:	..T	TAGGC...C	-----A...AT...A	CTGA	C...	
59534:	..T	----AT	.....	.....	.....	
52531:	..T	----TT..T	.....	.....	.....	

tilapia
 striped_bass
 zebrafish_a
 zebrafish_b

52247 52253 52259
 52236: CTTAGTGG-----TATTCAAT----GAAATAA----A
 24713: T...A.CACAGCCTATTGTTTCCCC...T...CTGGA...G.ACGC.

tilapia
 striped_bass

52276 52286 52296 52306
 52260: GCTATTTT---AAGCAAGTTCAAAAAGTGAACGTTTTGTGAAAGTTGTAA
 24763:CTTA....GGAC.....T.T.T...T.-----.....

tilapia
 striped_bass

52316 52324 52334
 52307: GGGCACAATGGGAA-----CGCGACAACGTGACA
 24803: A...C.....A...ATAAAAGAATTTAGTGAAAAATTA..T..GA.A...

tilapia
 striped_bass

52340 52350 52360 52370 52380
 52335: A----GAATAATAACAAATAATAGTAAATGTCGATTTTTTTAATTTCAA
 24853: .ACCCA...CGACC....A..C.AA.T..T.TT.....A...TGC.T...

tilapia
 striped_bass

52387 52397 52407 52417 52427
 52381: AA---TAAATTATGGTCTTGCTTCTTCCTTTAATCTTAATACTGCTTATA
 24903: ..GCC....ACTG...A-----.....G.TA..AA.G...G

tilapia
 striped_bass

52437 52445 52455
 52428: CACAGTCAGCAATA-----ATTGCAGAGAAAAA
 24939: TG..AC.G....C.CACACGATCACAACCTACATTTTG...G.A.A..T..
 85972:A.A..T..

tilapia
 striped_bass
 zebrafish_b

52465 52475 52485 52495 52505
 52456: GGTAAATAAATAAATAAATCTATTACATGAGCATAAAATCAGTGTA
 24989: AA..T-----C...T.-----...C..CAA.G...
 85986: TAA.T.....C....

tilapia
 striped_bass
 zebrafish_b

52515 52525 52533 52543 52553
 52506: AAACAATTGTTCTTAAAGAAG--TAACAAAATCTGAATATATCACCATT
 25015: .C.-----GA.....A.G.GCC..TG.....TC.....TGA....

tilapia
 striped_bass

52563 52573 52583 52593 52603
 52554: TTCGTTTTTTCTGGAACCTATTTTAAACACGTTACAAAGAGGGGAAAAA
 25060:A...TATC.G.T.TC.A..GT..TC...AC.CA.AAT...T.G.
 53542: ..T.....TT.G....C.TT..A...AG..A.AAAA...T..

tilapia
 striped_bass
 zebrafish_b

52613 52623 52633 52643 52653
 52604: GAAGATAAACATTTGAAGGCACAAATATTTAAAAATGTATCAAATTCATC
 25108: A....C.T.---C.TTTT.G....G..C.C.---TA.A..GT..T..T
 53584: A.G..GG..
 54988: ..T...T.....CAG.TT....TC..

tilapia
 striped_bass
 zebrafish_b
 zebrafish_b

52663 52673 52683 52693 52703
 52654: AGTGGAAAATCAACACAAGTGCAGGCCTGCTTATTCTGACTGGTAGAAAA
 25154: T..ATG..C.GG...T.TT.-----...T...C
 55014: .A.A..G.....GTG...A.

tilapia
 striped_bass
 zebrafish_b

52704:	TCAACACATTACGC-----TTATGTGTCGCTTATCTACTTAAGAATTTT	tilapia
25182:	A.....CA.T..AAGACA.A..AGT.T....T.T.TT..GC-.C....	striped_bass
52748:	CTGCGCCTTGCAAAGGATAGGAGCGTTTAAATGTCCAAAAACAATGGGAT	tilapia
25231:	T.CTA..-----C.AA.....-CA.TT....GA.GGC.AG.	striped_bass
52798:	GAGC---TCTGTTCCACTTTTCTTTGATTCAAAGTGTTTTTAATTATTT	tilapia
25269:	..C.GCA.....-----C.ACT..G.....-	striped_bass
52845:	CATTGAAAAGTAAAAAGTCATTAATGACGGACAGACAGCGAATTCGTTTCG	tilapia
25300:	---.TG..T.C....GC..G.C.....A.-----C.CA....A	striped_bass
52895:	CACTAAAGACACAAACAATATGCTGATTGTACACACATTTTATTTTCA	tilapia
25336:	T-.C....TT.....-GC..G.G-----TC.T.A.....-	striped_bass
52945:	TAAATGACAACATGCACTGACAATTTTTTTTAAATGTCITCAGTTCATT	tilapia
25368:	-----CT.T.G.....G-----T..TTA..A...	striped_bass
52995:	TTA-TGCAAATATCTACACCTAGTGTTAGACATT-GGTTATCTGTATATT	tilapia
25396:	AC.C.ATG.T.TC.A...G.AC.AA.CT....GCA...A....AC.G--	striped_bass
53043:	CTTTGCTGCTGTGGCTCTCCTTGAAGTGCAT-GTCTAA-TAAATTAAGCT	tilapia
25444:	--...GCA..T.AAT..A....AC.....CA..AC..C.T.T..C....	striped_bass
53091:	TTAAAAATGTGATT-----GCTTAAACATTTTGTGCTGCAGT	tilapia
25492:	..TG....C.ATC.TTAACGGACTTCA.TC.G.CGC.....C.T.TTG.A	striped_bass
53128:	GAGTCCGTGGATTATATTTCTTGGCTTTTAGGTTCTGAAATTCTACTCCC	tilapia
25542:	A.---.A.TAG..G-...C....T..AA..TA..T..TCTCAG....TT.	striped_bass
53178:	AACTGCAAACCCCCCTTCACGTGGAGGAATAAGGAA-----	tilapia
25588:	..T.A...CAT..T...T..T.AA.....A.....GTTGTTTCATGCACT	striped_bass
53214:	-----TATGTAGTTGCTCGTTTAGCCATTAATCCTC--CAATAGTTT	tilapia
25638:	TTCTAAAGG.....C....TT.G.CT.TTC...C.A..GTTG.AG.C..	striped_bass

		53274	53284	53294	
53254:	AAGC-----TGTGATTG--CTAATCAAAATTAGCAACGGTAGACAAAG				tilapia
25688:	G.A.GTCACTT...T.G..GT.....G..T...G.T.GT..T...A				striped_bass
86827:	...T...GC.CA..G.A.C..GTCGG.				horn_shark

	53304	53314	53324	53334	53341	
53295:	GTTAGTGACTGTTCCCTTGCATTTTGGAAAATAATTCTTT---CTTTTTT					tilapia
25738:	.C---.T.CA...TC..TTAC.GT.G.GG..C....G.CGC..A.A.C					striped_bass
86854:	.C..A..TT.....T..					horn_shark

	53351	53361	53378	53388	
53342:	TCTGTGTTATGGCTTTGGGCGCTATCCAC---ACGGCACACTATGGCTTA				tilapia
25785:	CT..CTG..A..ACCAA.TG.TG.CT...TGG.A.AA.A.AA..A.AAA.				striped_bass

	53393	53403	53413	53423	53433	
53389:	A-----GGATAGATTTTGTATGAGCGTTTACCCATATCCAAATGTTTCC					tilapia
25835:	.AGGGG.A.A.T.....A.....T.....T.....A....A.....					striped_bass
50868:	..T.T....GA...CA...A.					pufferfish

	53452	53462	53472	53482	
53434:	ATAAAGGCA-AAAAGGTGTTTTTTCGCCCGAATCTGTATCACATCTTGAA				tilapia
25885:	T.TG.....C.A..TA....CT.GG.....T.....				striped_bass
50888:	ATG.TG...ACAT.....AA..TT..C.TCT.TC...G.AC....				pufferfish

	53492	53502	53512	53522	53532	
53483:	AGTAGAAAGGATTTTTTTTTTTTACTCCATCGTCATTTAGAGCTCCATATA					tilapia
25935:	T.C.....-----T...GCT.....AG.....G....					striped_bass
50938:	CAC....GA..-----T...G.T.....G.G...G....G.					pufferfish

	53542	53552	53561	53571	53581	
53533:	GACAAGAGACCTTGTGAGAGCCAT-CTGCAATCCGTCACCATTGTCACGG					tilapia
25976:	C.....T.....T..C....A.					striped_bass
50979:	..G.G.....-.....T.....G.....A.					pufferfish

	53591	53601	53611	53621	53631	
53582:	CACTTCTCTGATAATCTAAATTTACAGTAACTGTCAGCAAAGATGTATA					tilapia
26026:	T.....-T.....					striped_bass
51028:	T.....T-GT.....					pufferfish
58730:	C.A.T...T....A--..T.T...G					zebrafish_a

	53641	53651	53661	53671	53681	
53632:	TTGGTCAAATAGGCCTTCAGTTCCGTGAGTATCCTCTGAAAGCACCTGC					tilapia
26075:	T.....A.....C...ACA.TA...G.....GGAA.-A.					striped_bass
51077:	CC..CT....-A.....C...ATGCTA.G.GA.....T.GGAAT--G					pufferfish
58766:	..					zebrafish_a

	53690	53700	53709		
53682:	CCATG-TACAAAGCTTATTTTTT-CCGACAATAAAAT-----				tilapia
26124:	..G..A.CTGGCT.....G.-..TCA.....CTCTAGCACGAGG				striped_bass
51122:	.TG..A.C.TGCT.....C.GA.T.A..C..TC.CTTTAAAGAGG--				pufferfish
87097:	...C..G.C-----				horn_shark

	53723	53733	53743	
53717:	---TAAGGAAAGATTTCTG-----	AAACAGAATGGGTTTTAA---		tilapia
26173:	CTG.....TTTTT...T..TGCGCATTTAG.G..A.T.A.C.C..C.AAT			striped_bass
51170:	---CTT...CT.C...T.C--CCCATTAGG.GT...T.ACA.C..T.AAT			pufferfish
87106:	---C..A...G...G...-----	A.TGT.TCT...T.AAT		horn_shark

	53757	53767	53777	53787	53797	
53751:	---ATGCAAAATTATGTATACAATGTAAGTCAGTGTGTCAGTAACGTAAT					tilapia
26223:	TTT...G.....GCT..G.T.G..A...CT...-----	T.TG.				striped_bass
51215:	TTC...GG.....G.G.G..G...CTTA.-----	G.G.AGTG.				pufferfish
86723:					C	zebrafish_b
87142:	ATA					horn_shark

	53805	53815	53825	53835	53845	
53798:	CC--AAATACTGTCCATTAGTCCACTGAATACTTTGACATTTTACAGTAG					tilapia
26267:	TTTG....G..CC.TT.C.....A..GTC.A..G..TGA-----	T				striped_bass
51255:	TTCC....G..TCATGGGG.GGGGGG.G-----	GGGA-----	T			pufferfish
86729:	T.--T.GAG.....AT...AT..C...--..T.A.....--	T				zebrafish_b

	53855	53865	53875	53885	
53846:	CATGACCTTACAATATATATATATATATGTATACACACACACATATAT--				tilapia
26308:	...T.T.C..TT.GGCC.G...G.-.GG.C..G.-----	TG...TGT.CA			striped_bass
51289:	...TGTTG..TT.....G.TC.-G.-----	TGAGATG..CC			pufferfish
86773:	...TTA..C....				zebrafish_b
88881:				..C.G.C--	Mouse

	53903	53913	53923	53933	53943	
53894:	ATATATATATACACACACACACACACACACACACACACATATATAT					tilapia
26352:	.A.G.G..TGC..G.TG.-----					striped_bass
51324:	.G.---.C.TT.T.G.-----					pufferfish
59628:	.G.....T.....C.C.---					zebrafish_a
88888:	.G.CCC..T.T.....G.G.G.G.G.G.G.....C.C.---					Mouse

	53953	53972	53982	53992	
53944:	ATATATATATATATATATA-TACACACACACACAAAACACACCAATTAG				tilapia
26370:	-----T..T.G..TT..A...T...GCAG....TTAC..				striped_bass
51339:	-----T.....A				pufferfish
59668:	-----C.....C.....AT...				zebrafish_a
88935:	-----C.....C.....				Mouse

	54002	54012	54022	54032	54042	
53993:	GCCTAACATTATGACCACTGGTGAATGAATAAAAAAGTTAACTCTCAAAAC					tilapia
26405:	...GG-.C...-TA..G.AA.T..T.CC.GG.C-.GTTA...A...TG					striped_bass
51344:	...-C.G-----C.TG.G...-----					pufferfish

	54052	54060	54070	54080	
54043:	TTTGATTCACTTTAAT-----ATGAAAAAAGGTTTTTCATAGAG				tilapia
26452:	CC.CT..T...GG...TCTTGAGCTTCC...T..TGT....A...A..				striped_bass
51360:	--.CC.AG...AG-----A.GGG...C-----				pufferfish

	54092	54102	54109	
54081:	TAAT-----ATAAAAAATACATGTAGC---AACAAGT			tilapia
26502:	.T..TCACAGCTGAAACATTAA.C.....G..TCCA....			striped_bass
51384:	-----G..TTT.AG...TTTGT.C.TG			pufferfish

	54119	54129	54139	54149	54158	
54110:	AGAATGAAC	TGTCCATCAG	AAGTCGTTTT	CACACAAGA	ATAACTTAC	-A
26549:	C	-----T	T..C....A	...TG..T	G....T...AG	
51412:	.A.T..GC	-----TG	..TAC.A.G	-----G	...GTAGCT	--

tilapia
striped_bass
pufferfish

	54168	54178	54188	54198	54208	
54159:	GTAAGTGGAT	AATGGCCGAT	CTGACCTGGT	CCATATTTAT	ACAAGGTATA	
26592:	A	...A.G....T	...C.....T	..G.AAC..		
51447:	-...AAAA	...A..AT	-----			

tilapia
striped_bass
pufferfish

	54218	54228	54238	54248	54258	
54209:	TATATATATA	AATAGAATGG	CAGTGGACTGT	AAATTTAGAT	ATCATGTGAA	
26642:	A	-----	C			
51464:	-----	.G...CT	...CA..T	T....G	-----	

tilapia
striped_bass
pufferfish

	54268	54278	54288	54298	54308	
54259:	GTCGTCTTAC	CCGTTGACAT	TATGTTGACAT	ATTGCCTCTC	CAGGTGGTCT	
26688:	...A.....	...C.....	C			
51500:	..TA..A..	-T.C.....	G-----	G....G..A	.....	

tilapia
striped_bass
pufferfish

	54318	54328	54338	54348	54353	
54309:	CTTGGCCATA	AAGGATACAG	TGGATCTTTG	GCGTAAAGTAC	-----GCAG	
26737:	G	.C.C.....	A.A.....G	..A.....	-----T...	
51538:	..C....G	.TA.C.....	GA.A--..AG	...C.G.CC	ATGC...	

tilapia
striped_bass
pufferfish

	54363	54373	54383	54393	54403	
54354:	CTGCCATTTA	CAATGAGTTA	GGTGCAGGAG	AGCCTGTGAG	ATTCAAAG	
26782:	.....	.....GA..A	A....A	..C..GA		
51586:	G	.G-----	GCA.A.....	-----	.C.A	

tilapia
striped_bass
pufferfish

	54413	54423	54433	54441	54451	
54404:	TAGCAGCTTT	GCCTTGCAGC	AACAGTGTGCT	AACAA--G	AAAAGAATGGC	
26832:	...T....C	A.....	C...TGG	.G...A....	-----	
51615:	C.....CC	.G...AG...T	..A.....T	-----	A....	

tilapia
striped_bass
pufferfish

	54461	54471	54481			
54452:	AATTTGTTTC	GAGAGAGAAAA	ACCGAGGCCTTC	-----		
26878:	.GC..T...TTGA	..AC.G...A	T.....G	CCTCTGGTTGTTGCT		
51659:	GGC..C.G.TA	C.ACAC.CC..	-T.T.....TCCTGTGGTTGCTGTG			

tilapia
striped_bass
pufferfish

	54490	54500	54510	54520	
54487:	GA-----	GTTTTCA	GTCCTCCGCAAGAGCATATCCAAAA		
26928:	..AAAGAAGA	AATTCACCT	A....G..T...TC..TG	.....	
51708:	..-----	AATGTCAACCT	.G..GCTC.T..A...TC...G..AT.C...		

tilapia
striped_bass
pufferfish

	54530	54540	54556	54566	
54521:	TCTAGAAGTT	TAGTTATTGAG	AAAAGC----	TGAGAAAAAATCATAAAA	
26978:	-.....G	...C.T.G..G	...GTC...AATG...A.....TC..CT		
51752:	..A...TAA	.A.AAA.C			
51340:			GGT...C.....		

tilapia
striped_bass
pufferfish
pufferfish

	54574	54584	54592	54602	54612	
54567:	GA--AAGTAAAACATATACTA--CGTCAGCCGATCTGCAGTTGATCTCTG					tilapia
27027:	T.TTTG..GTT.A.A...T..-----C.....CA.....					striped_bass
51358:	..----A.....C.C.T..ATT..AG.A...G.A...TA...AAC.AC					pufferfish

	54622	54632	54639	54649	54659	
54613:	TAGTTTTGAGGTCCCTCTTT---TAAATGCCAACTTCTATCTCCTGATCT					tilapia
27070:	G.A..A....CT...CCAC.G.....T....G.A.....					striped_bass
51404:	C..GCG.T.C..T.AG..C.-----CAA...					pufferfish

	54669	54679	54689			
54660:	ATGTCATACAATGCAGTAGTAGTTGGACGTGTGAGCTTC-----					tilapia
27112:	-----AC.....GTA.....					striped_bass
51858:	CTT..T...T..T--AA....TA.AA.C.TCTT..TACCAGATGCAA					pufferfish

	54701	54711	54721	54729	54739	
54699:	-----TTAAATAGCTCTAGGTAATTTTGCACA--TTTAAACTCTTTT					tilapia
27133:	-----GG....T.GG....-C.....TT.....A..C...					striped_bass
51903:	ATTCTAC....G...					pufferfish
53731:			...TC..AA..C.....AT..G.			pufferfish

	54749	54764	54774	54784	
54740:	GGGGGGACCA	TCCT-GGGC---	GCTGA-CCCGCGCTAAGTGCTCCCCCA		tilapia
27174:	T....G.....C....A.....				striped_bass
51963:			A.A.....T----		pufferfish
53754:	A..T..GA.C-----A..				pufferfish
121993:			-T.G..A...CA.-----		Human
117273:			-AAGGA....-T.G..A...CA.-----		Mouse

	54794	54810	54820	54828	
54785:	CCCCAACTCCCCAAAG----	CTGAACAGAGCCCGCAAAACTG--	AAGTCC		tilapia
27216:	-----C.GA---T.TG.AC.GA..T.T.....A...				striped_bass
51982:	-----G.-----T...AT..T.TT.....				pufferfish
59801:			..AC-----		zebrafish_a
84889:					horn_shark
122010:	----TG...T.T...AGACA...T.T...C.TTTT.G..GC.CA.....				Human
117303:	----G...T.T...AGACA...T.T...C.TTTT.G..GC.CA.....				Mouse

	54838	54848	54858	54868	54878	
54829:	AAGTCCGGGGTGAACCCCGGGTC	ACTGCGTCTAACAGATATGAAAATGTC				tilapia
27257:	A.....					striped_bass
52024:	...A.....A.....G.....C...					pufferfish
59812:	...G.....A.TG.AA....CT.....A.....					zebrafish_a
84895:	...G...A.....ATT.A....C.....A.....					horn_shark
122058:	...G...A.....TT.A....G.....A.....					Human
117351:	...G...A.....TT.A....GC.....A.....					Mouse

	54888	54896	54906	54916	54926	
54879:	GCCTCTTTGG--AAAAAGGGCACGCCTTGTTGTTTAACAAAGACTGTCAA					tilapia
27306:	AA.....					striped_bass
52074:	...C...A---T.....					pufferfish
59862:	A.A.T-----TC.G.....					zebrafish_a
84945:		CG..T.....AC.				horn_shark
122108:	.G..A-----GTG....G.....GA.					Human
117401:	.G..-----GGTG....G.....GAC.					Mouse

	54936	54946	54956	54966	54976	
54927:	TGGGCAAGATTAAATCAGAAACAAAATGGAAACGGTGTCAC					tilapia
27356:	TATGGGGTCA					striped_bass
52121:	GT					pufferfish
59906:	G.A					zebrafish_a
84988:	T.T					horn_shark
122151:	A.A					Human
117442:	TAT					Mouse

	54986	54996	55006	55016	55026	
54977:	GGCAGAAGTTATCTCTGTTTAGGGGAGCGAATAGAATAGAGGGGGGACGA					tilapia
27406:	A					striped_bass
52171:	CC					pufferfish
59956:	AA.C					zebrafish_a

	55036	55046	55056	55066	55076	
55027:	GAGAGAGAGAGAGAGTAGAGAAAGAAGAAGATAAAGAAAATGGGAGAGAA					tilapia
27455:	T-----G.A.A.G.A-----C					striped_bass
52216:	-----TGT.GG.C.GA.GA-----A					pufferfish

	55086	55096	55106	55116	55125	
55077:	AAGAAAGCTTAAAATATTTCCGAAAATTTGGCCTCTGGTTTCTCCAT-GC					tilapia
27484:	TC-----G-----T-----T					striped_bass
52244:	C.TC-----G-----T-----T.CA					pufferfish

	55132	55142	55152	55162	55172	
55126:	AG---AGGCCTTGTTGATGTGGACAGCGTGGATCAGCTTTATGAAGAGCT					tilapia
27532:	---C-----T-----AT-----G-----					striped_bass
52293:	AGA-----A-----C-----T.G-----T.G-----T					pufferfish

	55182	55192	55202	55212	55222	
55173:	GCTGCATCTTCAAGAAACACAGATAAAGTGTGGAAGTCACCTCGGACGTG					tilapia
27579:	C.GG-----C-----C-----A					striped_bass
52343:	G.GC.C.-G-----C.C-----G.A.A.A					pufferfish

	55232	55242	55252	55262	55272	
55223:	GGGAGGAAACTGGGCCTGGACGTGATGGCTGCCGGCGAGATGAACGGTCA					tilapia
27625:	A-----AC.A-----AT-----G.GA.T-----					striped_bass
52388:	AA-----G.GCC.A.T.G---AAT.AC-----C-----					pufferfish

	55282	55295	55305			
55273:	GAGACTTTTATATCAT-----CTAACATGCAGTCAGAGAAAAACA--				tilapia	
27675:	A-----G.TT.TATCATGTG-----T.T.A.A.T.T.TT				striped_bass	
52435:	T.T-----C.TC-----C.TT.T---				pufferfish	

	55317					
55314:	-----AGAAAT-----					tilapia
27725:	TTTTTTTTTTCATTATAT.T...GTATGCGAGCCTGGAAGGATGATCCTGC					striped_bass
52461:	-----CC...A-----					pufferfish

	55324	55337	55347	55357		
55320:	-----TATACTTTACGTT-----TAATGATTCCAGATCTTGTTATTAT				tilapia	
27775:	ATTTG.GC.G...TT.CTCTAAAA...GCATT.C.T.C-----				striped_bass	
52467:	-----TA.A-----C.A...C				pufferfish	

55358:	TATTA-----TTATTATTATTATTATTAT-----	55368	55378		tilapia		
27825:	A...CAATAGAGG...A...G.....GTGTTGTTGTAGTT				striped_bass		
52483:	...C-----A..CGCGCGCG.CC.AAGG...-----				pufferfish		
55385:	---TATTATTATTACTATT-----ATT	55391	55401	55406	tilapia		
27875:	GTAC.C.GGA...T..G.CCC.TTACACTTTTAGTACCCTTCTCTTC.AC				striped_bass		
52510:	-----CC..AGG.T..G.CCA.-----AC				pufferfish		
55407:	AT-TATTATTATTATT-----ATAGGTTTCTTGGTAATACTGGGG	55415	55425	55435	55445	tilapia	
27925:	.CA....T.C...G..GCAATACATG.C.A....T.ATC..TAG.CTT..					striped_bass	
52530:	.C-----GC.GC...CCAATA----.A.A..A.TGCTT..-----TT..					pufferfish	
55446:	ACACTGGAC-----TTTTATTTAACTGTT-----ACTGTTAC	55463	55477		tilapia		
27975:	TTGT.....CAAGT---GTTTC.GC.G.A..G....AACTCC.T..ACT.				striped_bass		
52566:	.A...T.T.TATGTAAAGTTCA....A...CA.T.-----				pufferfish		
55478:	AAC-----GCAGAACTGCACTGAAATCTGTGCAAAGTCTCCTTA	55487	55497	55507	55517	tilapia	
28022:	...TTAGCATGTT.....TT..T.T.TT...G.TG.....T..T.TG.GG					striped_bass	
52602:	...GGAGCGTTTT---..TT..T.TATT.C.AC.CTAT.TT.AG.G..AG					pufferfish	
55518:	TAACGGTTTTAAATACTTCCAAATTTATTCAGAATTAGAGAAAAATGCTC	55527	55537	55547	55557	55567	tilapia
28072:	A..A.A.-..T...CT.....C-----G..A.GTTG.A-.T						striped_bass
52649:	.G.GT...A.T..GCACAAG.G.C.C-----C.TGA..GT...-G.						pufferfish
55568:	AGATATAAG-TCGTTTTTGTGTGTCAGACTAGTTGGAGCTGACAGGTCTT	55586	55596	55606	55616	tilapia	
28111:	..C.G.G..A.TA...C.TC.....T..GC.A...TGA.ATTT.CAA.AA					striped_bass	
52690:	T...T.G.A-.GA-----AA..C.A.CA.AT.A...					pufferfish	
55617:	ACTGTACGTGCAGGTTTAAATCACAATCTTTTGT-----TTGGCAT	55626	55636	55646	55659	tilapia	
28161:	.TGC.C.A.C.T...CA.....T..CG.....TA-----					striped_bass	
52722:	GTCT...TG.T.TA..A...TGT..GCA.CG...C.TAAATACA..AA..					pufferfish	
55660:	CT--GGCTGTA-ATGCAAGACAGGTGCCTTACAGTGTTCCTCGCTGTTT	55667	55676	55686	55696	55706	tilapia
28198:	----TA..A.-.....T.....CC.G.TTG.....						striped_bass
52772:	..GA..T.A..TG.....AT-----A.ATC...GCAT.C....AA						pufferfish
55707:	GGACGAGCTTTTCCCTGACATGTA-----ACGCGCAGAGGCTGTAA	55716	55726	55738	55748	tilapia	
28233:	...T.....T.....A....-					striped_bass	
52812:	.T.AA.TGC..C.AAA..GC.T.GTTTCACGTG..T..T..AAG....T-					pufferfish	

	55758		55767	55777	
55749:	GCCACAGAAT	-----	GCGTGCAATTAACACTTAG		tilapia
28251:	-A....G..AACTGATCATACGTGATGGCC.T...TG..C.GTG.-C..				striped_bass
52861:	-----	TGTCCA.A...GG....A.----			pufferfish

	55787	55796	55806	55814	55823	
55778:	CAAGTTTGCAACGTGATA-GGATCGAACAAACAGAG--CAGGAATA-GCT					tilapia
28299:	T..AC..T..TG.G....TTT..A.G.....AC..AA....G...					striped_bass
52881:	-----	G.G..G.ATA..A.CTG.TC.G...--G.A..CT-...				pufferfish

	55833	55841	55851		55869	
55824:	TCAGATCGTT-GCCAT-GTGCTGGCAAATAAGGGGAAAA--GTGCAATTT					tilapia
28349:	.G.A..GA..G..TG.-..C.....TGCAAA....--AAAT....G					striped_bass
52916:	.T.TCCGAA.-ATT..G.CA.C.T.GG.G.GCAAA.G..CGAAAGGG..G					pufferfish

	55879	55889	55899	55909	55919	
55870:	CGAGTTTTTAAATGCAACAGCACTTGCCAAAGGGGGTGTCTGTCATTATATA					tilapia
28396:	.A..G.C.....					striped_bass
52965:	.AG.A.C..C-----A..A.GTTGC.G....TCT.AA....CGAG..					pufferfish

	55929		55946	55956	55966	
55920:	CACATTTGTGCAACTTG---AGCAGCCCGTTCTTTTTTTTTTTTTTTTTTT					tilapia
28416:	.G-G.....G.-----AGATGA.---CG....CC.G..G...A.					striped_bass
53007:	---GCA.....A.---A.CA					pufferfish
55980:						pufferfish
60825:	A..T....TTT.A.G.TAA...					zebrafish_a
60331:						zebrafish_a
93615:						Human
90653:						Mouse

	55975		55983	55993	56000	
55967:	GCA-GCTTATGTGTGAT-----CTTCTAGGTTT---TTATAGA					tilapia
28459:	.TG-----...CC.....AAAGC.....TAC.G..GC.					striped_bass
53042:	.GC..G.....C.CAAAACCTGCAAAAAAAC..AG..TCC.G..CC.					pufferfish
55998:	.					pufferfish
60349:	.T.-...C..					zebrafish_a
93633:	AA.-...					Human
90674:	.					Mouse

	56016	56026	56036	56046	
56001:	CAAGCAA---GCTTT-ATGCGCAGGCTTTGATGCTCGCATAGAAGCGGCT				tilapia
28491:	TC.TAT.....AT.....GTG..TC....G..C.....-				striped_bass
53091:	TC.TTTT....G.AATA...CT..C.--....A...AC..A...				pufferfish

	56056	56066		56084	
56047:	CGTCAGTGCTGGGTGTAAAGCTTGTGCAT--TCACCGTGTCTTTG-----				tilapia
28539:	-----AG.GG.....CTA.TG.T..T.T...TTTTTT				striped_bass
53139:	.C.GC.CT.C---AG..GTT.GTC....TTA.G....T..C..CATCCA				pufferfish

	56098	56106	56116	56126	56136	
56090:	-TCAGTAATTTGAA--GGCTGTTATATTACACAACACTACAGTTTGCATT					tilapia
28575:	C..GA.C....C..TC....A-----G....A...GA..G.T...					striped_bass
53185:	C.GGA...-----G.G-G..AAA..TG..					pufferfish

56143 56153 56163 56173 56183
56137: ---GCTGTGCTGGCCTTTTCTTTTCTTTTCTTTTCTTTTCTTTTAAACCCC tilapia
28618: ---.T.....T.....G..TC..TG. striped_bass
53214: TCAAT.....A..... pufferfish

56193 56203 56213 56222 56232
56184: TCTGCAGTGT TTTCTTTATT AGGATGCAACAGAT - TAAAACTCCAACAACC tilapia
28642: A . C TA . . . T CG . A . T A . . . A striped_bass
53230: - - - - - A . - GAA . CA . . . T . C . - - - - - G . CA . pufferfish

56242 56249 56259 56269 56274

56233: TCTTCCCTGT---TTGTTGGAACGGCGTTTTGTTATGAAAA----A tilapia

28686: G.CA.T.AC...CAC.A..A..T..A..C.....G...T..CCTGC. striped_bass

53264: G.CA.T.T.T.GTT.....TC.T-----C...A..T.T.TG.CTTG-- pufferfish

56284 56294 56304 56314 56324
56275: AACCTTAAGGTTTGAATTTCATATCTACTTTCTGTTTCAGAGGAGGCGG tilapia
28735: TTTTC .CC . . .GCCAT . . striped_bass
53306: - .TT .C-CGG.C.TCCG.GAT.T . . .C .- - - -T.A pufferfish

	56332	56341	56351	56361	56371	
56325:	A--TTGTTTT	AAGCGCAG-	GAAGCCTCGCCCGCATAAGT	TTGGCCCCGTG		tilapia
28785:	.TT..T...C.CAT...	AA.....A..A.....	A.....A..			striped_bass
53347:	.-.-.A...C.CATA.TA----	A.....AT.G..CC..TT.AAGT..				pufferfish
97030:				..G.....C.		Human

	56381	56390	56400	56410	56420	
56372:	CAGTAAACAAGTTAGTT	-GATTGGTTTTGCTTTATATACCGTGATTTAA	T			tilapia
28835:	G.....C.....T.....					striped_bass
53391:	GC.....TC.....					pufferfish
61399:					G..	zebrafish_a
97042:	T.....GG.G.-.T..					Human

56430 56439 56449 56457 56467
56421: AAGGAAAAACACTAACGTA-AGCCAGTCCAA--GCAGTGTGGTGGTACCA tilapia
28885:C.....G.GGA-..... striped_bass
53440:C.....G.G-.....G.A.....C.A..... pufferfish
61406: ..CA.....G.....C..A.CT.T.G.ACA..T.T..T.CT..G.TG zebrafish a

```

          56477      56485      56503      56512
56468: GTGCCATGCTTTC--CATTGTTCTCTGT--TTACATGATGCCACAG-GA tilapia
28933: .....--.....-..-..-..-..-..-..-..-..-..-..-.. striped_bass
53487: A.....-.....-.....-.....-.....-.....G.-.. pufferfish
61453: .....TG.....G.--.....G.T.....C.GGA..... zebrafish_a
87689: .....A..AT.....GTA.T.CC...TCC.GGA.....ACC. horn_shark

```

56522 56532 56542 56552 56562
56513: CACGCCGTGATTGGTGGCTCTTCACACGTGACCAGGCAACTTTGTACATT tilapia
28978: G G striped_bass
53532: GG G T pufferfish
61498: GG C . AT . T GA zebrafish_a
87736: . T A . - CC . . CT . TACAT . A . A . CT . . . A . . C . horn_shark

56571 56581 56591 56600 56610

56563: TGACAG-GGAGTAGGAGGGTTTGTGGAGATCAGAAAA-ACGACAGCGCG
 29028:
 53582:
 61546:A.....T.....GA.....T--.....A.C
 87785:-CA.....A..A--.....A..
 125171: .G...-AG.GG.AG...CC.C.GCA..CC.....A.....A..
 120470: .G.GA-.AG.GG.AG...CC.C.GC...CG.....C.....

tilapia
 striped_bass
 pufferfish
 zebrafish_a
 horn_shark
 Human
 Mouse

HoxA4a:1

56620 56630 56639 56649 56659

56611: ATAAAAATTAGTATTGTTGCAC-TTCACAAATTAATGACCATGAGTTCCT
 29076:
 53630:
 61594:A.....T..TT.....T.....
 87831: .G.....-.....G.....
 125219: .G.....T.....C..G..
 120517: .G.....T.....C..G..

tilapia
 striped_bass
 pufferfish
 zebrafish_a
 horn_shark
 Human
 Mouse

HoxA4a:1

56669 56679 56689 56699 56709

56660: ACTTGATAAACTCCAACATATCGAGCCTTCCTTTCCTCCATGCGACGAA
 29125:
 53679:A.....G..
 61644:C..T..A..T..C.....A.....T..C..A..C.....G..
 87879: TT.....CG..T.....AAAA.....A..T..T..G..
 125268: TT.....C.....CAAG..C.....C..T..G..G..
 120566: TT.....C.....CAAG..C.....T..T..G..G..

tilapia
 striped_bass
 pufferfish
 zebrafish_a
 horn_shark
 Human
 Mouse

HoxA4a:1

56716 56731 56738

56710: TAT---CAGCAGAGCGGAT-----ACATCCCTAACC---C
 29175:C.....
 53729:A..T.....A..C.....A..
 61694:C...A.....G..CGTAT---
 87929:TCT..A..ATAAC.....A..A..G..AAT..
 125318: ..CGCG...C...C.CGGGCGGCGCAGACGG.GG...GGG.GGGGG
 120616: .TCGCC.C...CG.T..CC-----G.GG.G---G

tilapia
 striped_bass
 pufferfish
 zebrafish_a
 horn_shark
 Human
 Mouse

HoxA4a:1

56746

56739: CGGTGAT--TATTA-----CGA-----
 29204: T....C---C.....
 53758:C.....
 61723: .TC.....T..
 87961: TCC...A---C.....
 125368: .CCC.GC--..CC.GCAGCCCCCAGCGCCCC..CCCAGCACCTGCCGCT
 120642: T..G..CGGCGCCG-----T..G-----

tilapia
 striped_bass
 pufferfish
 zebrafish_a
 horn_shark
 Human
 Mouse

HoxA4a:1

56754 56764 56774

56754:	-----GCGGCCAAAAGATACGGGCTT	tilapia
29219:	-----	striped_bass
53773:	-----	pufferfish
61738:	-----A.....G.....CC.....	zebrafish_a
87976:	-----GCGG..CC.T..A..	horn_shark
125416:	GCAGCAGCCCCAGCTCCCTCACGCGGGCG.....G.G..CCCCT..C.	Human
120659:	-----G.G.C.C....A	Mouse

HoxA4a:1

56784 56791

56775:	CCCCCATCACG-----AAGAGCCATCCTATC-----	tilapia
29240:	-----C-----	striped_bass
53794:	-----A-----GC.....T-----	pufferfish
61759:	-----G...G...A..C-----	zebrafish_a
87997:	..AT.....T...G..CTA..C-----	horn_shark
125466:	..TA.TA.G..CCGCGGACCGCCCGC.....CG....C-----	Human
120675:	..G.GG.C.C-----GAGCG.CC.GC.C.TGCCGGCCCCG	Mouse

HoxA4a:1

56818

56801:	-----C-GAGGTCAA-----ACT-----ACACAG	tilapia
29266:	-----T-----	striped_bass
53820:	-----T-----	pufferfish
61785:	-----C.A.....CA..	zebrafish_a
88017:	-----ACAA.....C...	horn_shark
125505:	..T.CT.C.GC-----G..GTACCCCGCG..TG.	Human
120712:	AACCCGCA.-.C..C.CGCCAGCCCCCGCTT...G.GC	Mouse

HoxA4a:1

56834

56819:	AATCGGG-----ATACGATTACGGTAA-----	tilapia
29284:	-----C-----	striped_bass
53838:	-----G-----	pufferfish
61803:	.GCA.A-----C..T-----	zebrafish_a
88035:	.GC..AC-----C...AGC.T.AAC..	horn_shark
125533:	GGC..C.GACACCGCCTACCC..T.GC...C.CGG-----	Human
120752:	CGCG..C-----GCG...GCC.A.CT.CCCCGGGGGCCTGT	Mouse

HoxA4a:1

56846 56863

56841:	----CGTCCCCGCCACCG---GAC-----TCGACG	tilapia
29306:	-----T-----	striped_bass
53860:	-----T..GA.....G..G.	pufferfish
61825:	----T..GT.AA...A---AT-----A...	zebrafish_a
88057:	----T...AA.G...T---CA-----A.C.A.	horn_shark
125569:	-----G.G..AG.C-----G.GGCCGCCCCAGCCCGAGCAGC.CC..	Human
120788:	ACCC..CG.....G...CCT.T-----C.T...	Mouse

HoxA4a:1

56873 56883

56864:	ATTTCAGCGATGGGCATCACGCACAACC-----	tilapia
29329:	G....C....C.....	striped_bass
53883:	A.....	pufferfish
61848:	CC.T.....G.....	zebrafish_a
88080:	.CA.GTCGC.AA..GG...T.TG..GT.	horn_shark
125612:	GCGCA...C.A...CCAG....GG..	Human
120818:	CC.G.C...GG.CCAGC.C...G.G...CGAGCAGTCCCCGGCCCCCGGC	Mouse

HoxA4a:1

56903 56913 56923

56892:	--GCAACCG-----GTTCCACAGAGCCACGGTCC-----TCGCC	tilapia
29357:	.....	striped_bass
53911:	G..A.....C.....	pufferfish
61876:	--T...T.C-----...T.G...AT..T..A.....C....	zebrafish_a
88108:	--...GG.T-----AGC.TC..A.AT...ATA..GAGACAGAATCA..T	horn_shark
125640:	-T...TG..AGCCAC..C.TG...CC...GCTG..GCCGCCCTGCA...	Human
120868:	GC...C..CAGCCCG.CC..G...CC..C..CG..-----CC.T.G	Mouse

HoxA4a:1

56932 56942 56956

56924:	TCGCG-----GCGGCCCCAGACGGTGGC-----GCAAACGCCA	tilapia
29389:	..A.C-----...T.....GCAGGG....T....	striped_bass
53943:	..T.C-----...GCAGGG....TT....	pufferfish
61908:	..A.C-----A...AA.CT.TGTGGGT.TT.GG.T.GA.	zebrafish_a
88150:	.T.T-----AA.T..T.....A.....C..A...	horn_shark
125689:	CCGTGCCCCCA.....GCGGC.CT..GAGGCG..CCC....	Human
120909:	G.A.T-----...CT...G.C.C-CAC.ACCCCG..TGT...G.	Mouse

HoxA4a:1

56966 56982 56992

56957:	GCAAAGACTGCAGCCTC-----GCCACTGAAGTCTATCCCG	tilapia
29428:	G...G..A.....	striped_bass
53982:	A.....GC..G....C....	pufferfish
61941:	A...G....T.....TGT.A..C.CTCTC..G.	zebrafish_a
88178:	..TTT---.T...A-----AATGC...AAA.CC.A.T	horn_shark
125739:	C.CC..G.----.T.C-----G..GG.GGCAGCGC...C	Human
120947:	CGGGG.G.A..GC..C.GCGTGCCCCTGCT..TGGC.G.CCAGGG...	Mouse

HoxA4a:1

56993:	GCGTAGC-----GAAG-----	tilapia
29464:	.....	striped_bass
54018:	T.....	pufferfish
61977:	..TC.CA-----	zebrafish_a
88211:	..CC..A-----A.G.TACTC	horn_shark
125771:	GC.CGCTGCTCTTGGCCGACAAGAGCCCGCTGGGCCT....	Human
120997:	...GGC.C-----	Mouse

HoxA4a:1

57011 57021 57031 57041 57051

57004:	--GGCAAGGAGCCGGTGGTCTATCCTTGGATGAAAAAGGTCCACGTTAGC	tilapia
29475:	-----	striped_bass
54029:	-----T-----C-----C..CT	pufferfish
61988:	--A.T..A..A..A...G..C..C.....A....T...AT	zebrafish_a
88227:	TCA...A....CA.A..T..C..G.....G..AA.T....C.	horn_shark
125816:	--.....C.....G..C..C.....G...A....T..C...	Human
121009:	--.....G..C..C.....G...A....G...	Mouse

HoxA4a:1

57061

57052:	AGCGGTGAGTTAT-----	tilapia
29523:	.C.....	striped_bass
54077:	.A.A.....	pufferfish
62036:	.C...A...A..	zebrafish_a
88277:	.C...A...A.C	horn_shark
125864:	GC...AC..GGCGCCGCTTGGGAGGCGCGGGAGGTGGGCCGGGGCTGGG	Human
121057:	GC...AT..GGC-----	Mouse

57072

57065:	-----CATCACGGTTAAA-----	tilapia
29536:	-----G-----	striped_bass
54090:	-----GG-----	pufferfish
62049:	-----GTA...G-----	zebrafish_a
88290:	-----T.AAG-----	horn_shark
125914:	CCTGGGTTTCGAGGG..GG...C.GGAGGGAGAGGCTCAGGGGAAGGGGGC	Human
121070:	-----GCCGC...GAGGG-----	Mouse

57080 57093

57078:	-----TAACTGAACCAC-----TGAG	tilapia
29549:	-----G.A.....	striped_bass
54103:	-----G.A.....T-----A	pufferfish
62058:	-----C..TAA..G.T-----AGA	zebrafish_a
88296:	-----T.A.A-----T.A.A	horn_shark
125964:	CTCGGGAGGGGAGCCCCC.T...C..GG-GCTGCG-----G...	Human
121083:	-----C.G.G.GCGTGGGGGCGCGGGGCAGGGCGC.G.	Mouse

57103 57112 57116

57094:	AAACAACCACTG-----GAACACAC-----GCA	tilapia
29565:	-----	striped_bass
54119:	C-----A.G.....G	pufferfish
62074:	---GC..TG...GGG.GTTCTTCG.A.	zebrafish_a
88313:	.TT...TTGAAA-----TCGG.TGT-----G	horn_shark
126004:	.TGTGGGT.TGT-----CG.G.CA-----C	Human
121116:	.GGGG...C.CATCTGGCCGGCGCTTTGGCTGT.GGTGTGT-----G	Mouse

57126 57138 57145

57117:	AGCCTATTGAGGC-----AACACTAGTAGC-----AGCC	tilapia
29588:	-----G-----	striped_bass
54142:	..T-----G-----	pufferfish
62100:	...A.G.A.GAAA-----CC..G.T...AT-----T..T	zebrafish_a
88336:	GAA.CC..TCT.T-----T-----	horn_shark
126027:	...GCC...TC.C-----TG..A.C.CTTTTGTACCCAGG.T.	Human
121160:	C...GCC.CA..CTGGTCCT...GTG..A.C.CTTTTGTACCCAGG.T.	Mouse

	57155	57164	57173	57183	57193	
57146:	CTTACAACAGCA-ATTTACGA-CTATCGAGCAGCAGGGTCGGTAATTAAG					tilapia
29617:	.....					striped_bass
54170:	.....					pufferfish
62129:	.A.TT.GAG.---.....TG-.CG....AT.A.ATCC....G...GG.					zebrafish_a
88357:	...T..TG.---.....-TC.C.T.A.T.TTA.....CA					horn_shark
126070:	.C.TT.T...G.G.....GACGC.A.A.T.TTA..G.A.....TA					Human
121210:	.C.TT.T.CTG.G.....GACGC.A.A.T.TTA..G.A.....TA					Mouse

	57203	57213	57223	57235	
57194:	GACCCTCGTAAATTTTATTGCCTGTGTTTCGTCTGTCGG-----GGCC				tilapia
29665:	.....				striped_bass
54218:	T.....				pufferfish
62175:	AGTTT...C.....TT.CT..AAG...C.C.C.....A..				zebrafish_a
88403:	.-.G.C.A.....C.....GATCTTGCTCCT...				horn_shark
126120:	.-..C.A.....A.....G.A.AGGCTTCA...				Human
121260:	.-..C.A.....A.....G.A.AGGCTCCC...				Mouse

	57245	57255	57262	57272	57282	
57236:	ATGTGCCTTTGTTGCTTTTT---AACCCAACTACCTCCACCACTGGAGC					tilapia
29707:	.....					striped_bass
54260:	...C.....T.....T.....					pufferfish
62217:	..T...TA...-..T..G.AT--G..AA.....A.T.TT.					zebrafish_a
88443:	T.....A.....CT--...T.....					horn_shark
126160:	T.....AA.....CTTC.G...C..TGC..AG.....T.----					Human
121300:	T.....AA.....CTTC.G...C..AGC..AG.....T.----					Mouse

	57300	57305	57320	
57283:	CGAGCCAAA--GTAATATTCAG-----CCCCGCTGTT-----TTTGTTAA			tilapia
29754:	CT.....C..A-----			striped_bass
54307:	CT.....A-----			pufferfish
62252:	TT.AA.G.G--A.C.C.C.A.A-----G			zebrafish_a
88472:	CC.....G			horn_shark
126205:	-----TTT--A.GGCTC..G.GTGTTT...T...CAATAGCC...G..			Human
121345:	-----TTT--A.GGCTC..G.GTGTTT...T...CAATAGCC...G..			Mouse

	57330	57337	57347	57357	57367	
57321:	TCATTTTCCTAAGC---TTGATCTGTCCCTGGATGCGAGTACTTGTGCACT					tilapia
29793:	G.....A...					striped_bass
54345:	A.T.---.....T.T....T.....ACG...CA...A					pufferfish
62275:	G.C...TAATT.A---GCA..T.TC..A.A.GCATTGACG.A..-TTG.A					zebrafish_a
88481:	C.....-TATT..AG-.A...TGT..T.C.-----TTGTC					horn_shark
126248:	A.....T..TT..CGT..T..G.A..T-----T.A.....TGTC					Human
121388:	A.....T..TT..CTT..T..G.A..T-----T.T.A.....TGTC					Mouse

	57377	57382	57392	57402	57408	
57368:	CGGCATCTCC-----ACATTAAGGTCATGTCCGTAAACTGAAACG----A					tilapia
29839:	..A.....A-----					striped_bass
54391:	..A.....G.G.A.....C.....C..A..T...TAGAT.					pufferfish
62321:	AT.--.TA..AAATG.TT.A...A..G.---.A.G.GG...T.A--TC					zebrafish_a
88514:	A.A--A.A.T-----TTGAA..AACT-----					horn_shark
126292:	A.--.TATT-----T..A.T.A.G.....A-----					Human
121432:	A.--.TATT-----T..A.T.A.G.....A-----					Mouse

	57418	57433	57443	57452	
57409:	GACAGAGTGTAGAACAA-----GCGACTGCAAATTTCCACCAA-ACCCAC				tilapia
29880:	...C...A...A...ACAGG...G...TG.T..C.....-.....G				striped_bass
54432:	...GT.AACC.AC.G-----CT..GTCT.CCAA.TA...ATATT				pufferfish
62363:	A..GAT..-----T...CTT..TCT-..T.GT				zebrafish_a
88533:	-----CT..TCTT..AGA...TTC.TT...				horn_shark
126318:	-----T...TCT.CC....CC-..TT.				Human
121458:	-----T...TCT.CC....CT-.T.TC.				Mouse

	57462	57472	57491	57500	
57453:	AAATTCGTGCACGATTTTCAAAGCTAGAA-TGTGTCCAGTGGC-GGATTT				tilapia
29929:	GTT.TATA.T.....CCT..T..-.....AG...C.A				striped_bass
54471:	..G..AT..T.AAC..ACAT.GTG.TC..TGA..A..T.AATATA.T..C				pufferfish
62399:	TT.GGGC.CT..A...----.TTT..T..G....CTA.T.AT.T.ACA.C				zebrafish_a
88558:	GTGCATC.AAT.CCA..GTC.GAT.C-----				horn_shark
126342:	TCTC..C.C.T.CT..CC.TCTCT.C-----				Human
121482:	---.CTC.C.T.CCC.CCTCCTCT.C-----				Mouse

	57510	57520	57535	57545	
57501:	AAGGGTTTTGGAGTAAACGCAATCAAC-----CTGCATGTAACACCTGCT				tilapia
29978:	..TA.C.....A.....T...G.A-----				striped_bass
54521:	A.....TG...C-----GG.....				pufferfish
62445:	T-----A.T.AT.C.TGAGAT..TCAA.....				zebrafish_a
88584:	-----G..GC.....				horn_shark
126368:	-----				Human
121505:	-----				Mouse

					HoxA4a:2
	57555	57565	57576	57586	
57546:	TGCCTCCCTGTCTATGGCTTTTTTCCCCC-----CCTCCCA				tilapia
30024:	...T.G....G.....T...T.....-T.....				striped_bass
54557:	...T.G.A...G...C.....CC.A.....-T.T.....C				pufferfish
62479:	..GT.ATG...T.G-----GTGTTT...G.C				zebrafish_a
88593:	.CTG.ATT.A.G.T...T.AC...TTGTT-----TTG.T...G..				horn_shark
126368:	C..TC..TCC..CT...C..C.ATTT.GGGGTTCTGGGT.TT...T..				Human
121505:	.A.T..TTCC...T...C..C.CTTT.GGGGTTCTG-GTGTT.....				Mouse

					HoxA4a:2	
	57596	57606	57616	57626	57636	
57587:	TGCCAGTTACAATGGAGGAGTGCCCAAGAGGTCCCGCACTGCCTACACCC					tilapia
30062:	C.....					striped_bass
54597:	G.....T.....					pufferfish
62506:	C....C...TC.....T.....C.....G.					zebrafish_a
88634:	CC.A.A....C.....A.....AC...T..A...T....GA					horn_shark
126418:	CC.....T..C....G.A...T...C.C..T..A..C.....					Human
121554:	CT.....T..C....C.AA..T...C.C..T..A..C....T...					Mouse

HoxA4a:2

	57646	57656	57666	57676	57686	
57637:	GCCAGCAGGCTTTGGAGCTGGAGAAGGAGTTCCACTTCAACCGGTACCTG					tilapia
30112:	C.....T.....					striped_bass
54647:	C.....A.....					pufferfish
62556:	C.T.....T.A.A.....T.T.....A.....					zebrafish_a
88684:	.A..A..A.TC..A.....T.T.....T..T.A					horn_shark
126468:	.G.....TC.....T..A.....					Human
121604:	.G...A.TC....A.....A.....T....C.....					Mouse

HoxA4a:2

	57696	57706	57716	57726	57736	
57687:	ACCCGGCGCAGGCGGGTGGAGATTGCTCACACCATGTGCCTGTCCGAGCG					tilapia
30162:	A.....T.....					striped_bass
54697:	...A.....C..G....T....T.....					pufferfish
62606:	..T..A..TC..A..T.....A..G....T....T..T..T.....					zebrafish_a
88734:	...A...TC..A..CA.T.....A....TC.T.....T..A...					horn_shark
126518:	GC.C..CA.C....C..C....GC.C..TT....T.....					Human
121654:	GC.C..CA.C....C..C....GC.C..T....G.....					Mouse

HoxA4a:2

	57746	57756	57766	57776	57786	
57737:	CCAGGTCAAGATCTGGTTCCAGAACCGGAGGATGAAATGGAAAAAGGAGC					tilapia
30212:	T.....G....G.....					striped_bass
54747:	T.....A.....G....G.....					pufferfish
62656:	T....G..A.....T.....CC.C....G....G..A..C...					zebrafish_a
88784:	G.....T.....A.A.....G..A..T...					horn_shark
126568:	T.....G....G..A..C...					Human
121704:	T.....A.....G....G..A..C...					Mouse

HoxA4a:2

	57796	57806	57816	57826	57836	
57787:	ACAAGCTTCCCAACACTAAGATCCGCTCCTCAAGCTCGGCCTCAGCTTCA					tilapia
30262:	C.....GT.C...					striped_bass
54797:	C..A....C..A.....C.....GT.G..C...					pufferfish
62706:	G....T..A.....G....T..AC.--..C...					zebrafish_a
88834:	.T..A..G..T.....G..T..TG.T....AT.A..TT..A..					horn_shark
126618:	...A..G.....C....G..A....C.AT.....G..C..T					Human
121754:	...A.....C....G..A..T..C.A.A.T....G..CC.T					Mouse

HoxA4a:2

	57845	57855	
57837:	GCC-----TCGGGGGCCCAGCAGCAGCA-----		tilapia
30312:	.....		striped_bass
54847:	A.....T....GCAACAGCAGCAG		pufferfish
62754:	A..ATCACGTGAAAA..AC...ACT.....		zebrafish_a
126668:	C...GGAA....		Human
121804:	GC.T.GGAA....		Mouse

HoxA4a:2

57867 57877 57887 57897 57907

57863: -----GATCAAAACAGGCCAGCAGCTTGTCCCCACGCCGTGCACCGCAGG tilapia
 30335: -----C.....G.. striped_bass
 54886: CTCCA.....T.....G.....T.....C.G.T.TCA. pufferfish
 62791: -----A.C-----GC.T..T.....TT..T.TAA zebrafish_a
 121825: -----C.AACTC....C...CACC.CCA..... Mouse

HoxA4a:2

57917 57926 57936 57946 57956

57908: TCTATAGTGCATGAAC-GAACCCCCATCCCTGAAAACCCCAATCCAGAC tilapia
 30380:T...T.....A.-C..ACA....A..... striped_bass
 54936: C.....T.TTTTG.....A.-C..ACA-----T..... pufferfish
 62821: C.....TA... zebrafish_a

57966 57976 57986 57996 58006

57957: TGAGATGGCAAATAACACAAGTGGAAATTTGATGGACCGATTCTCAGTATT tilapia
 30428:T..... striped_bass
 54979:T...A...C...G..C..... pufferfish

58016 58026 58036 58046 58056

58007: TTACACACACACATGGTGTTATCTCTTTCACCTTGCCTCTGCTATTGGGC tilapia
 30478:C.....C.....C..... striped_bass
 55029:T.....C-----T...C..... pufferfish

58066 58075 58085 58095 58105

58057: CCCTGTCACGT-CCTTTGTGCCCTTACCCCTCTCCCGGTCTGTCCTCGCC tilapia
 30524:A.....T....T...C...C..... striped_bass
 55070:C...T..C.....AT..C.TG----G....C.....T...A pufferfish

58115 58125 58135 58145 58155

58106: CTCATCATATAAGCTTGAAATTCACCTTTAATTGCCACGGTGGCAACTGA tilapia
 30567: ----- striped_bass
 55117: ...C.....C.G.....T..CT..TG.....T..... pufferfish

58165 58175 58185 58195 58205

58156: AGTGTTTATATATTTGTTTATTATTATGAAAGAAGGATAACGCACATCAA tilapia
 30613:C.....TC. striped_bass
 55167:-.....T.....TC. pufferfish

58207 58217 58227 58237 58247

58206: -----AC TTGGATGAAATGTATAATTGCAGTAAAAAGTGAGTGAGGT tilapia
 30663: ---ATAGG..... striped_bass
 22089:A.C striped_bass
 55216: TACGTAGGG.C.....C.....T...A.....AC.TAAG pufferfish
 103894:A..G..GG.G....A.TG-----A.....G Mouse

58257 58267 58277 58287 58297

58248: AAAAAAGTAAGTTTGACCTCATTTTTTCTTTCAATGTTCTCTTTGATAT tilapia
 22096: ..C...T...CA.AC.TT.T.....T.AAA...AA...AT..C...G. striped_bass
 55259: .CTG..C.....A..T.C-----G.....T.T. pufferfish
 103922: T.GG..C.G.T.CCCT.T.TT...C..TCC-----CT...T...TC.C. Mouse

58298:	TTCCTTTCC	58307	TTTCTTTATT	58317	--GTTGCTC	58325	ATGGAAAAGT	58335	TCTAATATACT	58345		tilapia
55292:	..TTA.CAT		...AT...G		.CGG..CATCA		...A..T.A		.....			pufferfish
103967:	...T...TTC		C..									Mouse
58346:	TGAAAGATA	58355	TTTAGCGAGACT	58365	CTATAGATG	58375	CCAGTTAGAAA	58385	ACCACACG	58395		tilapia
55342:	A...		--..A.....		--C.....		G.C.CG..G		----		GT...	pufferfish
58396:	CATTTTATT	58405	TCTCAATTTT	58415	TAAATTTT	58425	TAAATTTT	58435	TTTTTTTT	58445	TTTTTAGAGG	tilapia
55384:	.-----										.G..G...-	pufferfish
58446:	CATGGCATC	58455	AGTCAGAGTAT	58465	AGCAGTGTC	58475	TATGTGTGT	58485	GTTTCAGTGG	58495		tilapia
55393:	---..T....		---..T....		---..T....		G.TC.....		T..C....			pufferfish
58496:	TTGTTTACT	58505	GTTGAATGT	58515	AGTCCAGGT	58525	GACTTTT	58535	CACATCTAAT	58545	GTACAT	tilapia
55427:	...A.A.....						CG....		T.C.....			pufferfish
58546:	AGACAAATC	58555	ACAATGATGGC	58565	ACAATAA---		GGAAAGCGT	58582	TTTCGTCAAAGT	58592		tilapia
55477:	G....CT		A.....		---.C.G.ATAA		..CGTCTT..					pufferfish
63149:			A.....		TATA.G..TAA		.C.TCCTG...					zebrafish_a
58593:	AAGTTTATG	58602	TTTGGTGT	58612	CGTATG--	58620	GTCTAGT	58630	TTTTATT		TTGTGCTAT-	tilapia
55524:	.GAA..TC..		CCAAAA.....		G.CT.CG.....		C..C....		----			pufferfish
63187:	.GT.A.C.CA		-----		...T..GA--AC		.GCA.....		-GA...T...T			zebrafish_a
58640:	-AGTGCGT-	58647	CCATGTTGT	58657	GCTGTGTTCT	58667	AACTGTGAAT	58677	ATTTGTAT-	58686	AT	tilapia
55571:	-G.CA...C		.....		.....		.....		G.GG.			pufferfish
63229:	A...TA.-TT		.C..CA-----		..A..G.....		C..G.-..					zebrafish_a
58687:	GTTGTC-----		TCAGT	58697	AATGGCCGT-----					58709	TGT	tilapia
55620:	.....		.....G..AG		.....							pufferfish
63269:	T.G...ATTT		GTATA.TG...AA		.AT..CAAGTTT		AGTAAGCCTG...					zebrafish_a
58710:	GA-----	58712	TGTAGG---	58719	CTAGTTT	58729	AGAAT--AAATCTG		---TCCTTGTG	58744		tilapia
55643:	..-----		.C...GT-A...C		...GC.CAC...T		-----					pufferfish
63319:	.CAAGTAAT		CTAA		.C..GA.A...--		A..ACT.TA		.....			zebrafish_a
58745:	AAATAAATG	58754	TGTGCTTCACT	58764	TATAAGGCT	58774	GACATGGCTTCG	58784	--GATGTTT	58792		tilapia
55682:	.....		.....A.A..C		.TCC....T.AT		.T.C..C					pufferfish
63367:	..T..T..T		.CAAG..A.T.C		.GT.A.CA.G...AA		.TT--.T.A...					zebrafish_a

58802 58812 58822 58832 58842
58793: TGTCACCGCAAATACGGATTTCACCTTTCACGACATTCAAGGTGCCAATTT
55732:T...-----..G.G.G..-T.....-CAT.G..G.
63415: G.CT. tilapia
pufferfish
zebrafish_a

58852 58862 58872 58882 58892
58843: TTTTAAAAAAGTATTCTCATTGTTCATTTATATTTTGTATTATTATT
55768: AC..C-----.....T.T.A...-GA..CC.C..GC.GA..G...TA.. tilapia
pufferfish

58902 58912 58922 58932 58942
58893: TTATTATTTATTTTTTTTGCAGAAATTAAGAACTTTGAACTAACATTGTTA
24954: ..AGG...A.....
55812: .GGAA.A..TCA....-----A...TCT...AT.CTGC. tilapia
striped_bass
pufferfish

58952 58962 58972 58982 58992
58943: CTTTTGGTTTACATTGAATTTCTATTTCAGTGTGTGGACTATTGCGCTCTG
24971: T...CA.....
55846: GG..GA....G..-----C-----T.T.AAAA.CTAT
88581: ...AA..T.. tilapia
striped_bass
pufferfish
horn_shark

59002 59012 59022 59032 59042
58993: AAGCTTTTGGTAAGAAATCCAGCCATTTGAGATGCGTACTTAAAGTGGTC
55878: ..A.C---.ACG...GG.G...G....A-----
88591: .G.T...GAA...C.C..A...T.... tilapia
pufferfish
horn_shark

59052 59062 59072 59082 59092
59043: ACATTGTGTTGCAGTCCCAACAATTTGCCCTTGCAACATGTTGGCAACAT
55904: -----...AG..G..T.CGA...TCG...CAT.----- tilapia
pufferfish

59102 59112 59122 59132
59093: TGTGGCTGCGTTTTCTTCCACTT-----TTTAACACTTTGCCAGA
55932: -----..C.T.G...T..GTAAAAATAG...T...T..GAT.TT. tilapia
pufferfish

59141 59151 59161 59171 59181
59133: GTAGA-AAGAAATATTTGCGATAAATGTTATTTACAGAAAGGTTTCATT
55972: A.GT.TGC...TGC.....TT..C...-----..CC tilapia
pufferfish

59190 59200 59210 59220 59230
59182: TGATAG-TATTGCGCACCTCCGTTAAATACATACACGTTTCATCCGAAAA
56002:ACC.GG....G.A.TT.--G..G..T..A.G.T.C..----- tilapia
pufferfish

59240 59250 59260 59270 59280
59231: GACATTTTCCATTACGAATGCGCAAAATCGCTTTTCGAGTGAAACCTAAG
56042: -.T....G.TGC.GTTT...TT...T...TG...AT.C....G.GCG.. tilapia
pufferfish

59288 59298 59308 59318
59281: --AAATGCAATGCCATGCACAACTTTGACAGAGTGAAGTCTTAT-----
56091: TCGC..A...CA.A...T.G..CT.G..TTC.TA.CTGA.T...TATGG tilapia
pufferfish

59333 59343 59352
59324: GTCTTTTTGTTACTGCTGAGTG---TTC-----TGAA
56141: .GT..A..ACC.....CGT..ATA...CAATCCATGAAATGCGCA.... tilapia
pufferfish

59353:	59362	59372	59382	59392	
56191:	C...TA....TA...G.-----AG....T.C.T				tilapia pufferfish
59402:	59417	59427	59437	59444	
56224:	GAGG.G.....C.G.-----TG..GC.....TTAT....				tilapia pufferfish
59445:	59454	59464	59474	59484	59494
56268:	..TC.....-----T..GG.TC...TC....T...AAAC.....				tilapia pufferfish
59495:	59504	59514	59524	59534	59544
56313:	A.....TC..AAATTC.A.A.T-.A..G.....A.....				tilapia pufferfish
59545:	59554	59564	59574	59584	59594
56362:	A.....--.....A.CA.....				tilapia pufferfish
59595:	59604	59614	59624	59634	59644
56410:	T.....CT.....CC.....				tilapia pufferfish
124629:	.C....AA.....				Mouse
59645:	59654	59664	59674	59684	59694
56460:	TG.....T.A...C.....TG.TCC..C....C...				tilapia pufferfish
124649:	.AA.A...				Mouse
59695:	59704	59714	59724	59733	59743
56510:	C.GG..TA.TTC...T....G...T.AAT.....				tilapia pufferfish
59744:	59753	59763			
56560:	.G....-T.....C..G..T..TC..AGACTTTACCTTAAATCATTCC				tilapia pufferfish
59772:	59780	59790	59800	59810	59820
56607:	TA..C...A...T.A..T...C..-----TCG				tilapia pufferfish
59821:	59830	59840	59850	59860	59870
56643:	GAAGAAAGGGAGCAGATATGAGCAGAAACGGATAGATGTTATTTAGTGTG				tilapia pufferfish
98531:	AC.T.G.T...AT.T.CT..C.GTA...ACG.G.T..-GGCCA...A.A				Human
	A...A.AGAG....GA..G...G....C...				
59871:	59880	59897	59907	59917	
56692:	TTGGCACTGATGGTTTTA---GCCCACTGAATATGCCACTAACTGCACAC				tilapia pufferfish
	...-----C.T....TGT.A..GT.C.G.T..AATT...AA.TCAGT				

59918:	59924	59934	59944	59954	59964	
56735:	TGGA---	TGGGTCTGCAATGAAATAAATGCTAAATTAATTGGAGTTTTTT				tilapia
56735:	.T..ATT.TTA.T....T.A....-T....C.GGC...A.-----					pufferfish
59965:	59974	59984	59994	60004	60013	
56774:	TTAATCCTCAGAGTGAGAAATAGATAGTTGTACATTTTCG-TGTATGCTT					tilapia
56774:	---.C..A..TG..-CT..T.GCT.C...A.TAGC.A.T.T.A.T..T..					pufferfish
60014:	60023	60033	60043	60053	60063	
56820:	TGCTTATTGAATGTTACCACACACAATAAAAAAATGTGTTCTATGTTGC					tilapia
56820:	.C.C.TC.....A--.A..A.G.A...C.C.G..G.C.A..TA.A.GC..					pufferfish
60064:	60073	60083	60093	60103	60113	
56868:	CGCAGACATGCTGAAGCTCCCCATTACTGTGCAGCAGTTGCTTCAGATAT					tilapia
56868:	-----					pufferfish
60114:	60123	60133	60143	60152	60162	
56872:	GGAAACTGTGCAGGAGATGACGCTGAGGCTGATTG-GCACCAATTTTGCG					tilapia
56872:	----G.C.....A.C...G.-----T.....C.....GG.A.....					pufferfish
60163:	60172	60182	60192	60202	60212	
56912:	CAGACTCCAAGAAGTCCAATTCTGCATAAATTACAGATTTCAAGTCATT					tilapia
56912:	TG.C.--CG..AGT.....TG...A.....					pufferfish
60213:	60222	60232	60242	60252		
56960:	GAGTCGCGAATAGAGGTCACTTCCAATGTACTGAAATTTTAATTGCCCC-					tilapia
64649:	..T..A.....					pufferfish
92853:	..T.CCA...T.....GA.TG-					zebrafish_a
131250:	T.....CTC..T-					horn_shark
126401:	..T.....G...CTTTGA-					Human
	G.GA..T.....G.G..CTCTTGT					Mouse
60262:	60271	60280	60290	60300	60310	
57010:	GTTACAGTGA-CTCGCTGAATAATGAATGCCGGGGGTCAGAAATAGATG					tilapia
64677:	T.T.....T.....A					pufferfish
92877:	.C...A...C..TAT.A.....AG..A...CTT..T.....A..					zebrafish_a
131271:	AG.....-...AT.A.....T....-A.CC...C.G.....A					horn_shark
126436:	.G.....-...AT.A.....T....-A.ATC...G...G...					Human
	.G...T....-...T.A.....T....-A.ATCA...G.G.G...C					Mouse
60311:	60320	60330	60340	60349	60359	
57059:	TGAAATTCTGACTTATTTTCATTTGAAGTGATCC-GCAGGGTGCGAGTCA					tilapia
92925:	A..G.C.....A.TGA.CT..T-TTG..C.....AG.					pufferfish
126484:	..T.G-.GTCAG...CG..C.A..TC..T.T.A.TCT.A..T..					horn_shark
	...					Mouse
60360:	60369	60379	60389	60399	60409	
57108:	GATCTCTTCTCTTCTGACAAAACCTCTGTCCGCTGGACACAGACTGGCATG					tilapia
57108:	CTA.....GG...ACT.T.....C.T....					pufferfish
60410:	60419	60429	60439	60449	60459	
57158:	ACTTGTGAGTAGACATGGTTGCTTCTTATTTTATTTAATTTATTTATTTT					tilapia
57158:	..C.....-----CTC....-CC..G.....A.A..					pufferfish

60469	60479	60489	60499	60509	
60460:	TAGCTTTGCAGTGATATCACAATTTTGCATACAATATCCCGGAAGTGCAA	tilapia			
60519	60529	60539	60549	60559	
60510:	TTTGCGCCATGATCTTATTGTGCATGTTACTGAATATTCCAATGCAAACA	tilapia			
60569	60579	60589	60599	60609	
60560:	AACCTTTCCCTGTTAATATCGCGTTTTGCCCTCTATGGTCCTCAAATCAAT	tilapia			
62066:	..	zebrafish_a			
60619	60629	60639	60649	60659	
60610:	TTTAAATCGGATCCATATCAACTTTTTATTGTTTGAAAAATATACATATA	tilapia			
62068:	TA..AT...AT.TA.A...ATA.AT.T.T.....T.....	zebrafish_a			
60669	60679	60689	60699	60709	
60660:	TACGCCTTTGGCATACAGGGTGGCCGTAGCTCCGGTATTCTGAGCAAACGG	tilapia			
62118:	..	zebrafish_a			
60719	60729	60739	60749	60759	
60710:	TCTACTAATCGTAGTGTTAGAAGTTCGATCTCCCGACCCCTCCACACGTG	tilapia			
60769	60779	60789	60799	60809	
60760:	CTGAGGTGTCCTTAGGCAAGACACTTAATCCCAAAGTGCCTTCCAGTTGAA	tilapia			
60819	60829	60839	60849	60859	
60810:	GGCTAGCACCGTGCAATGGAGCTTAGGCGCCAAATTGCAAAGACAATGCA	tilapia			
60869	60879	60889	60899	60909	
60860:	AAGCGCTTAGTTTACCAAGTGCTATGTAAGTGCAGACTATTTAGCCTGCT	tilapia			
60919	60929	60939	60949	60959	
60910:	TACTGGACCTCCTATGGACAACAAGAACAAGAGCATTACGATAGTCACAT	tilapia			
93968:	AT...TC.A.....TA...G.A.....	horn_shark			
60969	60979	60989	60999	61009	
60960:	TCAGTCTAACTTTGCTTTTAAATACAGATTTTAACTGAACACATAAATC	tilapia			
61019	61029	61039	61049	61059	
61010:	TGTTGTAAAATAAAGTAATACACATATAAGTGCAGAGGTAAAATCTACTG	tilapia			
61069	61079	61089	61099	61109	
61060:	CGTGTGTTTCTGTGTCTCTGTGTGTGTGTGTGTGTGTGTGGCAACTGA	tilapia			
61119	61129	61139	61149	61159	
61110:	GACGCTTCTATGCAATACAATTTTAATGAACCAAATAAACAGTCAGTAT	tilapia			
61169	61179	61189	61199	61209	
61160:	TTATGTTGGCAACGTTTCAGCTCCAAATAACTGCATGCACTAAACCACGCA	tilapia			

61219	61229	61239	61249	61259	
61210:	TCCCAATAAAAAATAAAAGTAAAATAATATTAATAGCAATGATGATA	tilapia			
72881:	GT.G....AC----	zebrafish_a			
61269	61279	61289	61299	61309	
61260:	GTAATTATTAACAGCTTTATTATTATATTGCTTTAAACCCCTAAGTGTA	tilapia			
72898:	-----TC.....TT.....A...TTCAC..GAAGG...A.TA.	zebrafish_a			
61319	61327	61337			
61310:	AGAAATAAATGGA-----CAATTCAGTGAGAGTG---AACAC-	tilapia			
72944:	.T.....C..GTGACACATCTG...A.ATT...A.AC.CAA.....A	zebrafish_a			
61351	61361	61371	61381	61387	
61344:	--AATAGTCAAGTTGTAATTATTATAACTTGTCCGTAAACTGTC----CT	tilapia			
72994:	CA..C.T....A...A.....TG.T.A.....AGAG.G	zebrafish_a			
61397	61407	61417	61427	61437	
61388:	GAACTTTATTATTATTATTATTATTATTATTATTATTATTATTATTATTA	tilapia			
73036:	G..T....C.A..	zebrafish_a			
61447	61457	61467	61477	61487	
61438:	TTATTATTATTATGGACGTAAGGCTATTTCAAATTTACTTGCAACTAAA	tilapia			
61497	61507	61517	61527	61537	
61488:	GCTTGCTGGGTCATTTCCAATAAAAAAAAAAAGCCAGGAGTCTGTTCAAC	tilapia			
61547	61557	61567	61577	61587	
61538:	ATGTAAATTAAATATCTTTATTACAACAATCTTATGCAAAAACATGTCA	tilapia			
61597	61607	61617	61627	61637	
61588:	GTCGTCCTAATCCGCCACAGTCTCGGTGTGGGCTCATCAGGGTGGCTCCC	tilapia			
61647	61657	61667	61677	61687	
61638:	CTCAGCTTCAGGCGTTGAATTTTGTCTTAGCCTTGATGTTGGGCTGTGTA	tilapia			
57912:	..T.CAT.A.....CA.A....T....G.-----GAA...	pufferfish			
61697	61706	61716	61725	61735	
61688:	AACCTCGCAGAAAG-AGTTATCTTGGTCTGAGA-GTGTGCGTAACCCAAG	tilapia			
57950:	..T...A.T.CC..C.....-C...C.GT..AC.....T..	pufferfish			
61745	61755	61765	61775	61785	
61736:	CCTGGCTGTTAAGAGCTCCAGTGTCAACATTGTGGGAAGATATGGACCG	tilapia			
57997:	.T.....T...A....GG..A.....C.....G....T.....TA	pufferfish			
61795	61805	61815	61825	61835	
61786:	CCGTCTGGCTAATATCCAGAGGTCTCTGCCTCTAACTCCTCTTCGCTGAC	tilapia			
58047:	-.....T.CG.....G...TCTC....T.T..G.....-	pufferfish			

61845	61855	61865	61875	61885	
61836:	AGTGATAAGGAGCCTTGATTTGTGTAAATACATCTGATACAGTTGTTTAA	tilapia			
58095:	T....T.G.....A...C.G..AC..C..AT..T.....T.	pufferfish			
88018:	C....	zebrafish_b			
61894	61904	61914	61924	61934	
61886:	TG-CGAAAACAGCCCGAGATTTAAAACGTAATCAATCAGGTACTTTTGGC	tilapia			
58145:	CAC.....C.TTGAGACC.CG.T-----AA....AT	pufferfish			
88024:	..-TA...GT..TAGA...C..G.TG.....A..CTTAA...G...	zebrafish_b			
61944	61954	61964	61974	61984	
61935:	TCAAGGAGAAAGTTTTAACTGCTTTCTTTGTGCTTTGTTTCTTCTGCTT	tilapia			
58180:	C-----GT.C.C.G.....	pufferfish			
111094:	..CC..AG....CT.CA..C.C..T...T..T.TT..	Mouse			
61994	62004	62014	62024	62034	
61985:	TTTCTTCTTCTCCCGAGCAAAATGCAAATCTGGAAAGTAGTAGGTTAGAA	tilapia			
58197:	-----AA....GTG.C...G.....	pufferfish			
111132:	...T..T..T.	Mouse			
62044	62054	62061	62071	62081	
62035:	AAAAAGTGAAATCAGTAGGGTAC---CAGCTGAGGACTTTTGATTTCCAA	tilapia			
58215:	-----A.T...C..G..ACT....G.G..GGCC...GA..GG..	pufferfish			
62091	62101	62111	62121	62131	
62082:	CTTCTCCTTGTTTTTGAACCTCCAAATAACTTTCCACTCAAGACTCCATTCT	tilapia			
58257:	G.AGGT.CG.C.-----T.C...GGG.C-----GAG.....	pufferfish			
62141	62151	62161	62171	62181	
62132:	CTCTGTCCTGGGTCAGGGAAAAGTTCAGGTGCGGTGGCAAAAGCTGGCGT	tilapia			
58290:	-----C...C.G..G.....	pufferfish			
76604:	A.....T..C	zebrafish_a			
62191	62201	62211	62219	62229	
62182:	AGGGGTTGTCTTCCAGAGCACGGCCGTGTCAAGCCAT--AAATCCGCTGA	tilapia			
58308:	-...A..AA...GA.AT.T..CTT-----TC.CTC...A..T	pufferfish			
76619:	T.....	zebrafish_a			
62239	62249	62259	62269	62279	
62230:	CAGCTTCAAATCTACAGAAGAAATTAACAAAATTATCATTTGCTTTAAT	tilapia			
58351:	..A.-..GC.C..G-----T..A..G-----	pufferfish			
62289	62299	62309			
62280:	AAAGGAAAGATAGCTCATCTCTTCACATTGCT-----	tilapia			
58379:	A.C.A.....GCAA...AG...TA.GTTGAACAAAACTA	pufferfish			
62320	62330	62340	62350	62360	
62315:	----TCCAAAGCCTAAAGTGCAAATTTAGCCTTCTTTCTTTAACTCTTA	tilapia			
58428:	TTTAC...T..T.-..CA.T.GCTC.G.AT..G.G..AA.CG..TGT...	pufferfish			
90674:	C.....AA.AG.A..TG....GA...T	horn_shark			
113062:	C.....CC.CT...CCG	Mouse			

62361:	TCCT-----CATTTCCTTCTTTAAAAAAAT--AAATGTAAATGT	62374	62384	62392	62402	tilapia	
58477:	AA.....ACAC.....C..C.CTTC.GTTT.TG.GGA...G..G...					pufferfish	
90704:	C...TAAAAGA...G.AT.....TT...TC.--.....T.....					horn_shark	
113083:	-----CCC.C.T.....					Mouse	
62403:	AGTAAGGTGAGCTAATAAGAGGGGCTCTGCCTCTGCTCCTGCCTTTTAA	62412	62422	62432	62442	62452	tilapia
25345:	CCC.						striped_bass
58521:	-----AT...C...A.T.T.....-----TG..C...						pufferfish
90752:	.AA.....AGC.CC.CT.T.T..GG...--A.AT...A.....						horn_shark
62453:	AGTTTACCGCTCAAGTTGTAG--TTTGAGAGGACAAAAGCTGATGTGGGA	62462	62472	62480	62490	62500	tilapia
25352:	.A.....TTCT.....C...						striped_bass
58553:	.C..C.....GT..C.....G.....G.....G.....						pufferfish
65793:	T.CT...A.C..A....TGCA.TG-...AA.						zebrafish_a
62501:	GTGGGGATGCTTTCTATGTCCGCCCAAATGATTAATAGTTGTGGTGGA	62510	62520	62530	62540	62550	tilapia
58601:	GC.....G.....G.....C.A....G-						pufferfish
65832:	.G....CTG.C..GCA..G--..G.GG.....TA-.C.ACG...-						zebrafish_a
62551:	TTTTTTCCACGCCCGCTGCTG-----CTTCAGT-----GTTGA	62560	62570	62573	62583		tilapia
58649:	C-----						pufferfish
65877:	----C.T...AG.TT...T..GATGAGCT....CTAAACACTTT.C...						zebrafish_a
62584:	CGGAAAACAAGCGCCAAACGGTGCCGTGAAGTAGAAAAGCTC--TTCCAG	62593	62603	62613	62623	62631	tilapia
58678:	T..A....A..T....G.G.T....G.						pufferfish
65923:	CT...T....A...-A..GGC...TT.....						zebrafish_a
62632:	GCTGGGATTTTGGCAGTACC-----TGGAATGTTTGAAGGCGGATATA	62641	62651	62655	62665	62675	tilapia
58725:	.A.A.---C..G..T..C.T.GAGTTA..C.G..-CA..A..A.C.---						pufferfish
62676:	TTTCACGGTTGTACACTATTTATATAGAACTGTTTCATATCAAGGCAGA	62685	62695	62705	62715	62725	tilapia
58769:	--..C.....GA....CACGA...-T...CTT.C						pufferfish
62726:	CATGGTGGA-----TAATAATTTTAAAAAATCCCCCCCACAACCC	62735	62736	62746	62756	62766	tilapia
58799:	.T.T...T..AGGTTTCTT.T..G..A.C.G-T....GT..GC.....						pufferfish
131355:	...G.T...TT..T.TTAC.TTT						Mouse
62767:	TTAACCTTTGCACCAGCTTGTAATTTCAACCATCACTCAGCTGTTTCAT--	62776	62786	62796	62806		tilapia
58845:	-----T..A..A..C-----C.....						pufferfish
136888:	.A..A.....C..TGT.....T...G..CTG						Human
131378:	..C.T....G.--G..A.A..C.....TGT.....A.G..CGG						Mouse

62815:	AGGAAACGCATAAGTGCATGTAGGTCTAATGGGGTCCATGTACTGATCA	tilapia
58879:	-----	pufferfish
136924:	T..T.....A..	Human
106548:		Human
131426:	T.....ATGG..TT.G...	Mouse
62865:	GCGGGGTCGAGCAGCAGCGCTTTGGTTACCTCAGCTCCGCTTTCCGCTCT	tilapia
58879:	-----TT..A..C-----G....A.AT.	pufferfish
106549:	T..T.G....G..	Human
62915:	CTGC---TGACTGACAGGCAGCCCTCACATCCACCAAGACGCTCAGCCC	tilapia
58898:	AATA.A.....T...C.T...GGGA.....G-----C..A	pufferfish
62961:	CCTTCATGTAGGACAGGTAAACGTGTAACGTGTTTGTATT-TGTGCAGAC	tilapia
58942:	.T.CG.G..GC.....T...CT...T.CCT.C.CACA..GG...	pufferfish
63010:	T-TTGCTGATGGAG-GACCAGAGGCTGACTAAGTGGTGCCAAAGCAGGAG	tilapia
58992:	.C.....ACA..T.....G.....-----	pufferfish
63058:	TCTGACAATTAGGACTTGGGGGCGATATTGAGTTGAGTTTTCTGCAAGGC	tilapia
59029:	-----C.C.....A..	pufferfish
95662:	..AC.....CT....G...	horn_shark
63108:	TCCTCTCAAACCTGACTGTGTTGTTACAGAGAAGGGAAAAAAGCAGAT	tilapia
59053:	CA...-----G...CA.....-G.GG.G...AG.T.	pufferfish
95683:	CA....T...	horn_shark
63158:	TCACTGCCAGCGAGGAGTAATTATTATCCACTCTTAAATTCTATTTAGT	tilapia
59082:	.GC...--..T..T.T.G...C..C.CG...-----GC...GGC.A.A.	pufferfish
63208:	AAGGTGTGTGTGTGTGTTTTAGAGGTGGGGTGCGATCCCATGCATAAC	tilapia
59124:	.TT...-----A..AAA.CC..T....CTCC...	pufferfish
63258:	GCGAATTATCACTCCGCAGCGCAAACACTCTCGTTA--CAGTGTGGCTCG	tilapia
59154:	-----..T..GA.TT.T.C...C.G.A...A..GATA..AA.CTA...	pufferfish
63306:	GGGCTGCTGTGCACTCGAAGCTCAGCATAATACGGCAGGATTAGCTC-TT	tilapia
59197:	-----TG.-----A.....T..	pufferfish

63355:	63364	63374	63384	63394	63404	
59222:	TCAGCTGCTAACAGGCACCAAAATATATGGCACTTTAAAACTGACAGAAC					tilapia
	..G.TC.....T.....GCGCCG.....C					pufferfish
63405:	63414	63424	63434	63444	63454	
59272:	GTCTTTACCCCTGAATGGGCGACACGTGGAAAAAAAAGCTGCTTCCCCT					tilapia
	..A...C..T..C...A..AA.....T.-----G-....					pufferfish
63455:	63464	63474	63484	63494	63504	
59316:	GCGAGAGGCTTGCTCCTCTGCCAGATACATTGCAGTGTACATACCCCTC					tilapia
131982:	..A...A.....A.....G....					pufferfish
	..T...GT...TA.					Mouse
63505:	63514	63521	63531	63539	63549	
59366:	TTTTTTCTCCC---TCCAACTGATCCGTTTCTCCTC--GGGGCAATGAC					tilapia
137521:	T.....T..AG....A.....					pufferfish
131996:	C....G.AAA..T...-..T..T.C..-----A..C--					Human
						Mouse
63550:	63559	63568	63578	63594		
59413:	TGCCTCCATTAATGAT-TCACGGGCTCAAATAAAAGGG----ATTTAAGT					tilapia
66771:	A.T-----A.....TTTCCTC..T.A.					pufferfish
98867:	T.....T..C..T.AAAT.....					zebrafish_a
137522:	.AGT...T.C.G..G..-..C.TATT.....					horn_shark
132033:	..GT...T.C.G..-..C.TATT.....					Human
						Mouse
63595:	63604	63614	63624	63633	63643	
59458:	TGACGTTGCGTCACGTGAGCGCGCGCATAAATACTG-CGCGGTGTTATGG					tilapia
66811:	C.....G.....T.....					pufferfish
98909:	A....C..GA.....T.G.....TG.TT...A.A....A					zebrafish_a
137566:	ATGAC.....A.-----A.-...AT.A..G...					horn_shark
132077:	ATGAC.....A.-----A.-...AT.A..G...					Human
	CTGAC.....A.-----CG..G...-A.AT.A..G...					Mouse
63644:	63653	63662	63672	63678		
59507:	CACTGGGAAG-AAAACCG-----GAGCCCCGGTCTGGC----CAT					tilapia
66861:	...G.....A.....T.....C.-----					pufferfish
98953:	TGAA...G-----GT.GATGGCATAC..A.....CT----GT.					zebrafish_a
137610:	..T.T.....T.....A..TATG....TTCGGC.					horn_shark
132121:	..T.T.....G.....A...A.A.A..TTCG.C.					Human
	T.T.....G.....A...A.G.A..TTCGTTG					Mouse
63679:	63690	63702	63709			
59543:	ATGATG-----CAGATTATATGCGGG-----TTACCCCC---AC					tilapia
66900:	T.....T.....T.---T.					pufferfish
98986:	G..C..ATA-----GC.C.GG.....T---					zebrafish_a
137643:	G...T-----AC.C..T.....					horn_shark
132154:	G...TACGTTTTCT....C.C.A.A.AGCCAGAGC..T.....A					Human
	GC...TACATTTT-C..G..C.T.TTA.AGCGAAAGC..C....CCA..					Mouse

	63719	63729	63739	63747	63757	
63710:	TTTCCGCGAGGGGAGTCCTGGCTTTGTAGT--GTTTATCCAGGGGAGG					tilapia
59574:	T.....GT.....-T.....G.A.A....					pufferfish
66921:	..CA.TAC..C..G.CTGG.T.A...G.AC....GCAGA.AT.CC..					zebrafish_a
99004:	...T.TT.A.A.....A.CTA..T.CT.C.....A.A.					horn_shark
137690:	CCC..A..CA-----CAC..CCTCCT.C--CC..CC..TTCTCC..					Human
113957:	...T..GAGAA..C.C.T.C...GG..T...TTC.C....A.CT....					Mouse

	63767	63777	63787	63794	
63758:	AAAAAAGAAAGTAGAGGCAGTCTGAGAGAAAGA-----GGAT				tilapia
59623:	..CGC---..AG.....A...A...G.....C..G				pufferfish
66967:	.G.T.TAGGGAG...AAA.A.G.A.A...C.....AAGC				zebrafish_a
99037:	.G.TT-----..C...G.C.C-----				horn_shark
137732:	.G.GC-----..TC.....C-----C...				Human
132259:	.G..CCAC...C.T..T....A.G..C....GTGCTCTTCCAGC..T.				Mouse
114007:	.G..CCAC...C.T..T....A.G..C....				Mouse

	63801	63817	63827	63837	
63795:	TCCG---GGTTTGTGGATG----TATTCTGCTGTCACGGACGGATATGTT				tilapia
59658:	C..A---T.....-TAT...A..T.....C.				pufferfish
67004:	A..ATAC.T...TC....ATGC...A.A.....T.				zebrafish_a
99060:	.T.A---CA.GAAG.A..A-----GAG..G..GA.-----				horn_shark
137752:	.G.A---.T...CA.C.CT---C..GGA..G..TCT..G..AG-----				Human
132277:	.G.A---.T...CA.TTCT---C..GGA..A..TCT..G.AAG-----				Mouse

	63846	63856	63866	63875	63885	
63838:	T-TTCCACGCGGACGGAGTCAGAGCTCGAGCT-TTGGGAGGATGGATTTT					tilapia
59704:	.G...A.....C.....G.....C.....					pufferfish
67054:	.-.....A.T..AAA..A..A.TC.TGCGCACCAT.....					zebrafish_a
99094:	--.G.TG.AT-----..A.CG.A.....					horn_shark
137789:	----.T.GC..ATG.A...GAG...AT.---CCA.....A...					Human
132314:	----.T.GC..ATG...C..TCG..CAC.---CCA.....GA...					Mouse

	63895	63906	63916	63926	
63886:	ATTTTGAGGTAT-----TTCCGCTGATTGTTCACTGTCGTGAG				tilapia
59745:	C.....CAC.....				pufferfish
67103:	C.....				zebrafish_a
99119:	TTCAAATAC.....T.....A.A.G.....				horn_shark
137831:	A.....C.....AT..AGA.....				Human
132356:	A.....T.....AC..AGG.....				Mouse

	63936	63946	63956	63966	63976	
63927:	TTATTGCTGCGCGAGGCAGAGGTCAGTAACAAAGGGTCCAGGGCTTCTTC					tilapia
59786:	AG.....A..T....T....T.----					pufferfish
67144:	..T...TG..T.A.A.AGA....					zebrafish_a
99169:	TT.A.....A.....GGA..G.CT.A.G..					horn_shark
137872:	...G...T.A...A...A.....-G.G.G.A.A..CT....					Human
132397:	...G...T.G..A.....-G...G.A.A..					Mouse

	63986	63996	64006	64016	64026	
63977:	TTCTTTCTTTTATTTGCAGGGAGATCAAATTGACACATATCAAGAAGCT					tilapia
59832:	-----CG...AT.C..GTG...AC.T.GG.TG...CG...-					pufferfish

	64036	64046	64055	64065	
64027:	TCATCTATGTATTAATATCT-CAGTT-----ATCACAGCTAATAG				tilapia
59868:	C.G..G...CC.CG..T.G.G.G...ATTTATGTAA....T.A.....A				pufferfish

64075	64085	64095	64105	64115	
64066:	AGCGAAGCAA	TACCTTAGAC	CAGAGCGA	TTTACACAGAT	TGTACGCAT
59918:	.TG..G...T.A.T.	-----	C.TG....	A...T.AG..	
					tilapia
					pufferfish
64125	64135	64145	64155	64165	
64116:	ACCATTTAAG	GATTTGTCTG	GGCCATTAAG	GTTGAGACAT	TGTTCCAGTT
59956:	----...TGT....	A.A.....T.	-----		
					tilapia
					pufferfish
64175	64185	64195	64205	64215	
64166:	TATGCTTGTTT	GCCCAACGCT	GTGATAAATG	CGGCTTTAAT	TTTCAGTCCA
59979:	-----A.GG....	AATAT..A..	-----	CA...C---	
					tilapia
					pufferfish
64225	64235	64245	64255	64265	
64216:	AAACTTTAAAC	AGAGGCGCGG	AAAAAAAAAAG	GGGGGGGGGG	GGGGGGGGGG
60007:	-.A.....GT....	CA..TAGG..C..	T.A.-----		
					tilapia
					pufferfish
64273	64283	64293	64303	64313	
64266:	CAAT--TTCAGT	TTTAATTGCAG	CTTTAACAGCG	TGAGCTATAAC	ATTTG
60038:	-.TA.AT.TA.A	CATAA....	CTCT.AC..AG	AG.-----	
					tilapia
					pufferfish
64323	64336	64346	64356		
64314:	GATTAAGAGGC	CTGT-----	GTTGTAAATAA	AGCAGCCATTT	TAAATAT
60085:	C..GT.T..TT.CA	.TG TAGCGAC	T.G....	AT.....	
					tilapia
					pufferfish
64366	64376	64386	64396	64406	
64357:	CGGCTTCCAAG	CAAAAGCTAA	AATAAATAA	AATAAATCAA	AGCGCTC
60135:	-----	T..G....	AC..A..TG.		
					tilapia
					pufferfish
64418	64428	64437			
64407:	G-----GCA---	CCTCTGTAAA	ACAAACATCT	CG-ATGT	
60155:	.CATTCGTGCC	AGGTA...CTC	.T..CA...C..	CC..TG.A.T	T.AAA
					tilapia
					pufferfish
64444	64454	64464	64474	64484	
64438:	TTTACG---TTTT	TGTGCGTAAAT	CATACATCAAG	ATGAGATCCGT	GAAA
60205:	CGT....	C.G.AC.....	G..G.....	A...T.TG..	A.A...
106570:				..G..G.T.A	..G
					tilapia
					pufferfish
					Human
64494	64504	64518	64528		
64485:	GAAAAAAAAAAG	TATAGGGAAG	CGGTGG-----	GGTTGTGTCG	CTCCGCC
60255:	-----AGC..T...	CGT..T.-----	T.A.....		
67896:		.C..A.C..T..C..	CCCGTTT....	C.GA..CT...T	
106584:	.G.....GG.A.A	...G..TT..			
					tilapia
					pufferfish
					zebrafish_a
					Human
64537	64547	64557	64567	64577	
64529:	AGGG-AAACGAG	GATATAATGGA	AGACGGAGTG	CCATCCAGG	ACCGGGCG
60289:	G...A.....C	T.....	C..		
67934:	T...-.....AT	...--....AT	A.G.AC	..T	
					tilapia
					pufferfish
					zebrafish_a

	64587	64597	64606	64616	64626	
64578:	GCCGCTCTGAGGTCACGGCGCTCCTG-CTTGATTATGGGCGCGGGGACT					tilapia
60339:	...ATG...G.....A..T..TC-.....					pufferfish
67980:	A-.G.....A...C.GA.T.....-T.....					zebrafish_a
100095:	G..T.T.G.GA-T.....TTTT...T.TGC					horn_shark

	64636	64646	64656	64666	64676	
64627:	TGGGGAAGATGGTGCGCCAGAGCTAATGACTATTTCGATCCATTTGTGGAG					tilapia
60388:	T..G...C.....T.G.....C.T					pufferfish
68028:	.A...C..CC.C...T.G.....T.					zebrafish_a
100135:	AG..					horn_shark

	64686	64695	64705	64715	64725	
64677:	AAATTGCTTGCCGGC-CAGCAGGGAAACAACAATGCGTTATTTGCATAT					tilapia
60438:	GG-----...AAA.A...A....G....G..GCA.....GC.G					pufferfish

	64735	64745	64755	64765	64775	
64726:	AGGCCAATTTTATGTTATTATGATTTTGTGCTGATAACCAGCCGTTTGT					tilapia
60482:	..CT.--.....-----T..CTTA...TC					pufferfish

	64785	64795	64805	64815	64825	
64776:	GTCTGTAGCGCTGTTTGTACACGAAGAATATCAGAATTTGGCCTTTTAGT					tilapia
60506:	.GT.AC...AA.....					pufferfish
57279:	C....A.....-A.					zebrafish_b
116570:	A.					Human

	64835	64845	64855	64865	64875	
64826:	TTCTGTTTTCTATTTTGTGTATTTGTTTTTCATAGACTGACACTGTCTGT					tilapia
60525:	-----C..CCAC..AA.GAC.....T-----T...					pufferfish
57293:	A....G.T.A..G.....					zebrafish_b
116577:	..T.T.C...CC....C...TAA.T.....T.A.A..CC...					Human

	64885	64895	64905	64915	64925	
64876:	GTGTAAGTCTGTGTTTTATGTTAAAATGAATTTAAATCGACTGCTTCCT					tilapia
60555:	A.-.GG.CGAT.A.CG..T...C.....---T...A..G.TGCAAT.					pufferfish

	64935	64945	64955	64965	64975	
64926:	TTAAGCTGTAACGATATCTTTACTTAACTAAAAATAGTTTGTTTTTTTT					tilapia
60601:	.CGT.....C.G.GAG...C.-----A....G.CGG.					pufferfish

	64985	64995	65005	65015	65025	
64976:	TTAAATACGCTTCATTGGATCTTGCAGTTTAATCAGAAAATCCCAAATAA					tilapia
60637:	AC....TT..C.-----G.AA.A.G.....					pufferfish
79841:	..					zebrafish_a

	65035	65045	65055	65065	65075	
65026:	AAGATGACTTAATTTCAATTCTTTTTTTATTTATTTACTTTTAAAGA					tilapia
60668:	..A..CCACG.....TG					pufferfish
79843:	..T...TT...A.G..A.GA..TGG.A..A..GC.A.....C.G..T.					zebrafish_a
116907:	...G.....G....G.T...G...TTG...T...G					Human
116659:	A.....A.AT..A..AAT..A.AA.....AC					Mouse

	65085	65095	65105	65115	65125	
65076:	TTTATGTTTGACTTTTATTTTAAAGTCATGACGCGCGGGCCTAAACAAC					tilapia
60684:	..C.CA.G.T.AAAA.GCA...A..T...G.-----A.....					pufferfish
79893:	G.A.....					zebrafish_a
59365:		GT.T...C..T...				zebrafish_b
116944:	...TA.AC...T.GC.....					Human
116701:	....					Mouse

	65135	65145	65155	65165	65175	
65126:	GCACGCGTAACAACAATTGCCTTATTATTTATAATTACATTTTCGATCTTA					tilapia
60722:	-----GAG.TG...T.T.----					pufferfish

	65185	65194	65204	65221	
65176:	GCAGTATATTGGAGCC-CTGGATTAAAAATAAAACCCA---CACTAATTT				tilapia
60739:	---A.G...G..C...GT.....TT..TTTA...TC..				pufferfish
90270:	..CAA..C...TT.CG.G.T.---AT.G.G...				zebrafish_a

	65231	65241	65251	65261	65271	
65222:	AATTTACAAAATCGTTGAAATGTTGGATCATTCTCCGAGAAAATGTAAAT					tilapia
60777:	..AA.GACGG.AAA.GA.....AAG...					pufferfish
90300:	TA..T.A.A..T.....GTA.A..G.T.AGA.AC....A..G..					zebrafish_a
60854:	A.....					zebrafish_b

	65281	65291	65301	65311	65321	
65272:	ATTTGTTCTACTCCTCGTTGCAGAATTCCAGCTTAGTAAATTCTGGCCAA					tilapia
60811:	CTT..A.....A.....CA.....AC....T					pufferfish
90350:	.A..					zebrafish_a
60865:	T..T.....					zebrafish_b

	65331	65341	65351	65361	65371	
65322:	CGGACGGTCTCCCAGACACCTTGAAGTGCCTTCGGTAAGTCCATATATCT					tilapia
60855:	.TCT...GCT.GGA.A...A.A.....C.....C....					pufferfish

	65381	65391	65401	65412	
65372:	TTATTGATTTGTGTTATGAATGCTTGATGGTG-----ATATCCTTA				tilapia
60905:	C.C.....A..GAGGTGATG.....				pufferfish
118505:	...C..C..T.GCAA..A...A.A-----TG....TG..				Human

	65422	65439	65445	65455	
65413:	TTCAATTTCTAATAAGCA---CCACACACGCCAC----CGAAGCACTCG				tilapia
60955:	TGT.....T.GGT..T.T...A.....GCGG.T...GG..AC				pufferfish
118540:	C---.GA.TCT.C..AT.TATAT...AG.A.A.-----				Human

	65465	65475	65485	65495	65505	
65456:	CAGGAATAGAGAAGCAGCCTATGGCTTGTACATTTCTTGTAGCAGCAAT					tilapia
61005:	TC.TG.....GAGGA.....G.T.A.....G..G..					pufferfish

	65515	65525	65535	65545	65555	
65506:	ATGACCAGCCCGAGAGCAATAATTCCTTCTTCCACTTGTCTTTGTGGT					tilapia
61055:	.G.G.TGCG.....					pufferfish

65565	65575	65585	65595	65605	
65556:	GCAATTTGTC	ACTATAAAAGT	GACGAGAGGAAT	CGCAGCTCTT	GGAGCGG
61105:	.T.....	C.....	T.....	A..	T.
					tilapia
					pufferfish
65615	65625	65635	65645	65655	
65606:	TGCCTTACTC	ATTTCAAAAACC	ACTTTCTGTG	AAAGCCATCT	GCCTTCCAG
61155:	CG...	C.....T	AG.....	A....A..	A.GT.T
					tilapia
					pufferfish
65665	65675	65685	65695		
65656:	CTGCCATAGT	TTTACAGCACT	GAAGTTTTT	GAAAATATTT	TTTTCTTT---
61205:	.CAG.GC.....	TT..T..TG	.AAC..GA..	-----G.....	A..AAA
					tilapia
					pufferfish
65707	65717	65727	65737		
65703:	-----TATC	AAAATTCCTTT	CTTTCTTTT	CTTTCTTTTCT	
61250:	AAAATAAAAAAT	CAGA....G	.GC.T.....	CG..CAC..	-----
					tilapia
					pufferfish
65747	65757	65767	65777	65787	
65738:	TTTCTTTTTC	CTTCCCACAT	TTTTGCGCCTT	ATTATGGCCG	GCAGTATACG
61291:	-----G.....	GGAGC...-	A..GAC..G	.A	
118183:				A...C.A...	
					tilapia
					pufferfish
					Mouse
65802	65812	65822	65832		
65788:	AGCCCCT----	CTGACTTTTA	ACCCTCTCCT	CAGGGCCAC	ATTAAAGAG
61316:	.C.A..ACAACG	A.....	CG...T.....	A.....A..	
118194:	...G..C-----	C..G..			
					tilapia
					pufferfish
					Mouse
65842	65852	65862	65872	65882	
65833:	AGAGTCGAAT	CAGCATTTT	AGCACAACACA	AAAGAAGTAA	ATAATTATACA
61366:	.A..G.....	C.....G..A	G.....	A...	
					tilapia
					pufferfish
65892	65902	65920	65930		
65883:	GACTGGCTAC	TTTTGTTTGG	GGGGGGGCAAA	--AAAAGCAC	AGTTAGCTTTA
61416:	AT.C-A.CG	AG.G.....	A.....GG.....	CG.C..G...AA	
					tilapia
					pufferfish
65938	65948	65958	65968	65978	
65931:	AAA--ACCCT	CACATGTGA	ATTTTGGGT	CCCACTCAAC	CTCCACGCCG
61460:	...TG.T..A...	GC.....	CT.G.....		
69145:		G.....AAAA	C.AA	.....	
					tilapia
					pufferfish
					zebrafish_a
65988	65998	66008	66018	66027	
65979:	TCCGTGTGTT	CTACACTTTT	AATTGTGTCA	CTGAATTTT	GTCCC-AGAG
61508:	C.GCG	.A.....C.....	C.....A..		
69178:	C.T..T.T..TC	----	C....G..T..		
					tilapia
					pufferfish
					zebrafish_a
66037	66046	66056	66066	66076	
66028:	CCTGAAACC	AGCAGAG-A	AGCTGCAGCT	CTGGACGTGTT	TACAGCCCGGG
61558:	.AC...G.....	A...AC.....	AG.....A.		
					tilapia
					pufferfish
66085	66095	66105	66115	66125	
66077:	GAAGC-TG	AGAGGACATA	AAATCTACT	TTTTCTCAGG	CTTTCTTTTGGCTG
61608:	..G..T.....	A...-----	C..TC.....		
					tilapia
					pufferfish

66135	66145	66155	66164	66174	
66126:	CAAAAGACAGC	ATTAATATGCTGAGGGATT	CCCCC-TGCTGCCGCTCTCT		tilapia
61650:	..G...C...TC...CC.C..A.....T....AC...C.G.T...G.				pufferfish
66184	66194	66204	66214	66224	
66175:	TCTCCCCTGGT	CTCGCTGCATGCTCCTCCACTTTGCCTTTTGGTGATGAA			tilapia
61700:	GG.G.G...A...G..T....G..T.----.C.....G				pufferfish
66234	66244	66254		66268	
66225:	ACTTGTGCCCATTTTTT	CACACCCTGCTCCTAGAGGGGG-----TTGATA			tilapia
61746:	..GGC.T.T.....CGTT....TTTCCCC...G..				pufferfish
66278		66291	66301	66305	
66269:	TAAATCGAATACAG-----CTTTGATCAGCTATGCTTTT				tilapia
61796:	..T...T..C.A..ACGCTGA.C.GA.GTC.TA....C...ATTTTA...				pufferfish
66315	66325	66335	66345	66355	
66306:	AATCTCAGCTATTTGAAAGCACA	ACTATATACATATATCTGTGCCTGC			tilapia
61846:	...TAA.ATA.AA.A.				pufferfish
56588:		.G.G.GTG.G.G.G....TG..T			pufferfish
92129:		T.....A....TG..T			zebrafish_a
66365	66375		66394	66404	
66356:	GTGTGTGAGAGCGTCTCGGTGTGCGCGCA-GTATTT				tilapia
56611:	T.T.T..G.GT.....				pufferfish
92154:	T.T.T..G.GT.....T.T.TGT..G.G.GT....G.G.GC.C				zebrafish_a
66414	66424	66434	66444	66454	
66405:	ATTTATTTTATTCTTGTGTTAAAAAGCCATAAAGGGCGTACCTGGCGCAG				tilapia
61897:				A....	pufferfish
92204:	...C.				zebrafish_a
66461	66470	66480	66490		
66455:	AAAA-----TGAAA-ACGCACTGCTGTCTCCTTTTTTTTCGCC				tilapia
61902:	ATCAGAGTGTAAG....GG...TG...GAATCTG.G..A.AG.AT				pufferfish
76969:			G.TT		zebrafish_b
66498	66507	66517	66526	66536	
66491:	--AAAATGTGC-AGAAATGCGGGTTAATGATTAAGCC-GTGGATAGAAGC				tilapia
61952:	TG.GG..T...A.A.....T..A.....A..T...C.C..GG..				pufferfish
76980:	--..G..T..A-.T....AA.TG....C.....AAT-----T				zebrafish_b
66546		66558	66568		
66537:	CCTTTATGTCCC-----ATGGAAATGGAAATGCAGCA				tilapia
62002:	T....T...GT-----A....C				pufferfish
77018:	.A...T.T.AT.TTCTTTCTTTTATAATTTG.TT.....GTG.AAT...				zebrafish_b
66578	66588	66598	66608	66618	
66569:	TGGTCGGGGCTGATTATTCCTTTGTATTCCACCTCTCTCTCCCTCTCTC				tilapia
62034:	.AAC..CCCGT.....TA...GTCT.CT.A.A-----				pufferfish
101391:		.TT.ACT.....TCT.....T.....			zebrafish_a
77068:	CA...A..A..CAG..G..T..G.C..				zebrafish_b

	66628	66635	66645	66655	
66619:	TCTCTCTCTCCC-----	ACATCTCATTCACTGTGTT	CATAAT		tilapia
62074:	-----	A.CA.GGCC...	-----		pufferfish
101423:	T.TCTCTCTATATAT.T..A.				zebrafish_a

	66665	66675	66685	66695	66705	
66656:	TCCACTGCAGGCCACGGAGT	ACATAATAACAGAAAAGATT	TTAAACACTT			tilapia
62088:	-----	C..GA...GCGGT.AC..C.CG.....GT.G				pufferfish
101244:		A.A....A.....A.T.				zebrafish_a

	66712	66722	66732	66742	66752	
66706:	T---AGGGAAGGACTGTGCT	ATTTTTGTAGAGATATAAA	TATATATGTAT			tilapia
62133:	.TAA.AC..T...-.....	C.AACCTTG..C-----	C..T.T.			pufferfish
101467:		...A.A.A..T.T.....T.....A...				zebrafish_a
77819:		...A.A.A..T.T.....T.....				zebrafish_b

	66762	66772	66782	66792	66802	
66753:	ATATTTTTCTTCTAGACGCACT	ACCTCATTTGGTTGGGGGAGGAGGAGA				tilapia
62175:	-A..A..A..G.....TG.....					pufferfish
101498:	A.A....-A.....AGG...TT.					zebrafish_a
77850:	A.A...CC.					zebrafish_b

	66812	66822	66832	66842	66852	
66803:	GGCAACCACTTGATTTGAACAGGCTTTCCAAGGCGCTA	CTTCATTTCAT				tilapia
62216:	G.....GAA...G.T.....T.....-GC.G.....					pufferfish
69668:		GAG.....	A.....			zebrafish_a
102584:		...T.G.....	A.....			horn_shark
141728:			.C.....A....			Human
136016:			.C.....A....			Mouse

	66862	66872	66882	66892	66899	
66853:	AATTTTTCTTGTCTATGGTGACGCTCTGGTTCGGGGCAG	TTCACT---	GG			tilapia
62265:	-.....TCG.....A.....					pufferfish
69693:	C.....T.....A..G.....					zebrafish_a
102602:	C-----AC.T.....A..T.....G.....T..CCTGCC					horn_shark
141740:	C..G.A..T.C.....CTG..AG.A..AG..					Human
136028:	C..G.A..T.A.....CTA..					Mouse

	66909	66916	66920	
66900:	TGACTGCATG-----	GTACTAGT-----	GAA	tilapia
62311:	..T...G..-----	G..-----		pufferfish
69740:	G.TG.....AGTATGTGCTAAC..G.....TTGTGCACGTTCTGGA.C			zebrafish_a
102646:	..T...TTCA-----	CCC-----		horn_shark

	66930	66940	66947	66957	66967	
66921:	GGATCACATACACCAGCATAGCCT---	TGGCCGACTTTAATATTGCTATG				tilapia
26698:		.C.....GTC....G..TC.A.....C..C..A				striped_bass
62332:	GC...A.....-.....T..G...G.....T.C...					pufferfish
69790:	.AGAG..TC..TAG...GC...CA--..TG.CA...G...A.A.CA.					zebrafish_a
102664:	A..CAG..AT.TTA.AATCC..GC---.TTTA.CA..C.....CA..A.					horn_shark

	66977	66987	66997	67007	67017	
66968:	AAGCCCTGGT	CATTGCTCTA	TAGCAGGACG	ATACATTCAAT	CTTGGGGCC	tilapia
26731:	.....					striped_bass
62379:	C.....	CT.....	T.....		C...C.T	pufferfish
69838:	.GAA.ACA.G.G.--	CA.T..A..	A.T.TA.T..	GTGGG...T.TAA		zebrafish_a
102711:	..A.ATACCC.....	---T.G.T.TT.-	AGAG..GC	AG.AAAG.		horn_shark
120277:				C.T..TCAA..		Mouse

	67025	67032	67042	67052	67062	
67018:	AGATA--AGTC---	TTATCTCGTT	GACCCGACA	ACTCACGCCT	GCTTTTCG	tilapia
62429:	C.....	AC.....	TG.....	AG.....		pufferfish
69886:	.TG.G-----	---C...T.TTAC..	A.A.GGCG.A	GA.A.AAT...T.		zebrafish_a
102758:	T...GC.....	CC.....	A.GGCG.-----	AC.A		horn_shark
120292:	..CC.--G...AAGCCC	.T.A.C.A...	T..ATGTC..T----	C.A		Mouse

	67079	67089	67096	67106	
67063:	TAATCTC---	GGTTTACCCAT	CCACGTCGAGT---	AGGAAAAAAGGAAA	tilapia
62474:	--A.....	T.T....C...	GAG.A.....	A.GC.	pufferfish
102604:			..T.T.....	TA...	zebrafish_a
69928:	.T...AGCC.C.A...	TG...TG...	A.AA		zebrafish_a
102797:	A.--A..GC	GT.....			horn_shark
120336:	..C...G-----	C..TTG.C.A..	GAAG.AA.G..G..A...		Mouse

	67123	67132	
67107:	AGAGGAA-----	AAAAAGGGGCTTCTCT	-----TG
62521:	...A.....	GG..A...T.....	-----C.
102619:	..G...CATTTTGTTTAATG...	CAAAAA...GT.	-----C.
102818:	-----	..GCTA.A.C.....	CCAGTTCTTTGCA
120374:	A..		

	67142	67152	67161	67170	67180	
67133:	GCTCTTCCTTTTTTTTTTTTTTTT	-GTTGTGGCT-	GCTAATACTCGGTG			tilapia
62547:	CA.....		G.....G..T..C.			pufferfish
102658:	.TCG..TT.....C.....C....					zebrafish_a
70023:			A...AG.C.---	A..C		zebrafish_a
102850:	A..A...CCC	GACCCCA..T.CC..T.TC-	C..CG---	A...		horn_shark

	67190	67200	67210	67220	67230	
67181:	TATGGCAGGGCGCAGTCTGCT	ACCGCTGCTT	CACCCAGTCAGCCCTGTCT			tilapia
62586:	C.....TC.CCG.....	TAC.....				pufferfish
70037:	C.AT.ACTATT...AG-	AG.TCT....T.TT--	TT.T.GA.T.			zebrafish_a
102896:	A..TTA..C..AT.AG-A.TA..T.T.--	A.CTT..T..CA.TTAA.T.				horn_shark

	67240	67248	67258	67277	
67231:	TTAAACTTTTCTCT--	GGATTACTGCTTTGATCGATTTC-	GTCGCTGAAT		tilapia
62636:	G.....TC.CCG.....	TAC.....			pufferfish
70084:	---G...ATC.---	C.G.A.T..-	T.C.....		zebrafish_a
102943:	GG..GT...G-----	AA.C.C.....	-CC..G.....		horn_shark

	67287	67297	67307	67317	67327	
67278:	GAGAAAATATTGCTTGGTGC	TCTG	CATTTCGTCGTAAGAGGATAAGGTAAG			tilapia
62685:	C..CA.....C.....		G.....C.....C.....			pufferfish
70128:	G..GC..C..GGC.....GC..GC.GC..C....	AGG.....				zebrafish_a
102984:	CT.....TGCC..G.....		G.CTA...C....C.....			horn_shark
142340:			.TGCGC...C...A.T.....			Human
136590:			.C...C...A.T.....			Mouse

	67337	67346	67356	67362	67372	
67328:	CAGGCCAGGAATAGGCT-CCCTCGGTTGT	A----	AATGGCTGAGTTTGT	A		tilapia
62735:	A.....	-.....	G-----	G.....	G	pufferfish
70178:	.T..A...AGGC...G.-T.TC.AA.GC.GTTTA.....					zebrafish_a
103034:	.T..A..CA.....	---A..AC.C..G----	G-----	G.....	A.G	horn_shark
142366:	G.C.C..CC...CG.T.C...CGC.G----			G.....	ACG	Human
136611:	.G..G.CACT.CC...CG.T...A.CGT.G----			TG.....	G.A.G	Mouse

	67382	67392	67402	67412	67422	
67373:	TGTCGCGCGGTGATTTATCACC	GATGACTTAGATCTCGGTT	CAGGAAG	A		tilapia
62780:	TA.....					pufferfish
70223:	-----	G....CGC.G..G.A.....			G...	zebrafish_a
103077:	-----C.A.....	G...A.....	A..G.....		A.....	horn_shark
142412:	-----T.....	GG.T.C.-.....	A.....		A.....	Human
136657:	-----T.A.....	GG.T.C.-.....	A.....		A.....	Mouse

	67432	67438	67448	67458	
67423:	GTTCACACACACA-----	CAGTCAGGCGGCCAGATT	TCT		tilapia
62830:	.....	T....GTC.A.....			pufferfish
70264:	T..T.G....CACTTGCTCACTCA.....	---A.....		C..	zebrafish_a
103123:	TG.				horn_shark
142457:	.....				Human
136702:	.....				Mouse

	67462	67472	67481	67489	67499	
67459:	C-----CAGCGTGGAGCGGAGGGG-CTGCGC-AGAGA-GCTCAAGTCTG					tilapia
62864:	TGTTCTG.-----	C.A.GCA.TG.G...TG.....	G.....	T.AA..		pufferfish
70311:	-----	C...A.CT...				zebrafish_a

	67509	67519	67529	67539	67549	
67500:	TCTTTTGTCTCTCTTTTCTCTGCCGTTTATGACTATCGCAATGGTTCGCC					tilapia
62912:	..A.....T.-----	T.....	A.GC.-----	TT..		pufferfish

	67558	67568	67578	67588	67598	
67550:	TGGA-GATACACACCACAGAGCTTCGTGATATCTTTTCCCGGTCATCACG					tilapia
62956:	.AT.T..G.T.A....A.....	-----	TTG...G...G.A			pufferfish

	67611	67621	67631	67641	
67599:	AGTGCAGA-----CACGGTGAAGACACGTCCTTTTCAGTCTGCGGTTTA				tilapia
62999:	T.T.GTGTGTGT.TAT....A...A..TA.....	A....A....CG			pufferfish

	67654	67664	67674	
67642:	ACAACGCTG-----AGGGCATT	TTTGAACTGATT	TGCT	tilapia
63049:	CTGCA....CATCGTAGACAAATGCAG.ATT.....	T.....		pufferfish
96008:		TC..AT...A...		horn_shark

	67684	67694	67703	67713	67723	
67675:	TTTTGTTATTGTATGCAGAACGGCACAG-GCCAGAATTGCTCGACATTTA					tilapia
63093:	-----	AA...A.....	T.....		T	pufferfish
96027:	C.G..CC.AAA.C...T..G...T....A..					horn_shark

	67733	67743	67753	67763	67771	
67724:	CATTTTCCGTGTGCTCATTTTATGATGATGCATCGCATAG--TTATGTGT					tilapia
63117:	--C.AG..GCGCACC.-----	A.AA.G..AT..G.....				pufferfish

67781	67791	67801	67811	67821	
67772:	CTGCTTCGGGGCTATGGATTATGAAACATACAAGAGGGCTTCTTTTTTTT	tilapia			
63161:	C...CA.-----T....CACT.GT.TT.A..T.....-	pufferfish			
67831	67841	67851	67861	67871	
67822:	GTTTTAAACTCTATTTTTTAAATCATTTTTTGTGCCCCGGGTAACTTTTGCT	tilapia			
63201:	-----A.A..A..	pufferfish			
67881	67891	67901	67911	67921	
67872:	ATCAGACATAAAACAACCCGTAAACAACAAAATCTCAACAGTGTTAAAT	tilapia			
63222:	G...T-----A.T..-----	pufferfish			
67931	67941	67951	67961	67971	
67922:	GCAGTATATATATATATATATATTTAATTTAATGTATTTATTTGCTTT	tilapia			
63237:	-----G.T..A.AG..AC....G.AA.G..A.A.ATT...	pufferfish			
67981	67991	68001	68011	68021	
67972:	ATTCAACGACGTGTAATGGCTAAATCTATAGAATCTACAGAGTAGACAGC	tilapia			
63282:	...T-----T.AAC.TA.T.....G....T-----TA..T.T.C.	pufferfish			
68030	68040	68050	68060	68070	
68022:	AA-ATGCAGGGTTTCATAACCAAGCGAAAAATGAATGGGAATATTTTATT	tilapia			
63319:	..TG.....ATC.....C...	pufferfish			
68080	68090	68100	68110	68120	
68071:	TCTACTCAAATCATTAGCTTTACAATAATAATAATAATAATAATAA	tilapia			
63343:	.T.-----T....GTT..GTGT.C.G-----	pufferfish			
68130	68140	68150		68163	
68121:	TAATAATAATAATAATAATAATAATAGCTGTTGAATCCA-----CTGT	tilapia			
63373:	CTGCG...GATGA.TA..CGCA..CTA.AA....T.T..TATGGGT.A..	pufferfish			
68173	68183	68193	68203	68213	
68164:	TTCATTGTTAATGTCCCATTAATGTCCCATTTATAAAAAGATTTCCCCCA	tilapia			
63423:	C.TTA.TA.G.C..AT.....C..TT-----	pufferfish			
68223	68233	68243	68253	68263	
68214:	AAGAGCAGTGATGTGTGTCTATCATAGTTTATAGTCTCTCCCCGAGGTTA	tilapia			
63451:	G.AGT..TG...C.....	pufferfish			
68273	68283	68293	68303	68313	
68264:	CCTACATGAATTATGGTGCTCCAGCAGCAGCCTCTAGCTGTACCATCCCC	tilapia			
63468:	----.G.....T.....G.TT..A.AG.CGTC..C.AC..TTT...TTA	pufferfish			
68323	68333	68342	68352	68362	
68314:	GGGTTTCTGTCTGCTTAATACT-TGCTTTGTTAGGGCTTGGATGTTCACT	tilapia			
63514:	..T..CGGT...T.CA.G...CAG.....CC.-----	pufferfish			
68372	68382	68392	68402	68412	
68363:	GGGCCGCTCATTCCGAGCGGGCAGTCCCGGCTCACTGACCCCCCGCCCT	tilapia			
63547:	----.T.....AT.AA...C.....A..C.....	pufferfish			

	68422	68432	68442	68452	68462	
68413:	CATATATCACCGCGACCGGCCGCCGCGCAGACAGCATCGACAGCAGCCAT					tilapia
63585:	G.....C.....CT...					pufferfish
70907:						zebrafish_a
144136:					A.C.T..	Human
123154:	T.C....C..C.....TAC.GC..C.A...C.....					Mouse

	68472	68482	68492	68500	68508	
68463:	TATTATGGGCGCTATGGAAACAAAGTTCAAAC--CATGGA--GATGGAA					tilapia
63635:	C..A.G.A.....C...G...TCAT..A...					pufferfish
70908:	TG...TTG..G...A.G---C...T.TGA.G...T--T....GT					zebrafish_a
144148:	...CG.TAAGT..-G.A...G---TG...T--C.....G					Human

	68518	68527	68537	68547	68557	
68509:	ATGCAAGGCCGCCGCC--GGTTTTTCAGGTTTCCTCGGGGCCCTTACATT					tilapia
63680:	C..AT...C...C.....T.T.....C.CTCA.					pufferfish
70953:	.C..GT.----TTA...C.....T..					zebrafish_a
144190:	...A.C.-----T.....C.TGGA...GTT..TTT.C					Human

	68567	68577	68587	68597	68607	
68558:	TTTTCTACCATTATGACGAAATGTAGAAAAAAGGGGGGAGAGGAATAA					tilapia
63730:	.CA..-----CAG.....C...GCAA.AAAA.A.A..CA.T					pufferfish
144231:	CC					Human
130311:			.G.G.G.T...A.....A.....			Human
125084:		.GG..AA.....G...A...AC...A.GGG..				Mouse

	68618	68635	68645	
68608:	AAAAGAG-----AGAGACTGTAT---GTGGCAAGCTCAGGGATATT			tilapia
63769:	GCCGTT.TTTATGCTCT...C...ATGACC.GA.TGCAT.A....C...C			pufferfish
130336:	G..GC.A-----T..A.....			Human
136914:		A.G---...T.G.AT.TG..C...CC		Mouse
125117:	G..G...			Mouse

	68655	68665	68675	68685	68694	
68646:	TTATTCTCTTAAAAATTATTTATTTTTCTAAAAGTGAAAAATAAAA-TG					tilapia
63819:	C.GC..CTGA..G..GG.C..-...A.GC.TT.....T.G.C....G..					pufferfish
136945:	..G.					Mouse

	68704	68714	68724	68734	68744	
68695:	GGTTGAAAGTTTGTGAATCCAACGGTATGGTTTTCACTCGCTATACAGGA					tilapia
63868:	A..C.....C..TG.TC..AAC...--AGG...-----A..					pufferfish

	68754	68764	68774	68784	68794	
68745:	AATTAGATACACCGTTGACAGCCCTGTTGGTAGAATAACAGTGTAAGA					tilapia
63907:	..ACG...T.GGT.C....G-----T.T.T.T.C.A.....					pufferfish

	68804	68814	68824	68834	68844	
68795:	AATATTATTTCTCTGTGTGGTAACCCGCTAACAAGCTATTTCCACAACGC					tilapia
63946:	-----					pufferfish

	68854	68864	68874	68884	68894	
68845:	ATTTCTCCATAAGGCCTACTGTAACCTATAATTCTGTTTCACTGTTAGTTAG					tilapia
63947:	-----G..GC....-----					pufferfish

68895:	AATTAAAGATTTTAAAACGCCACCCGGCATCTTTTCGCGTTTCTAAATGA	tilapia
63957:	-----	pufferfish
68945:	TTTGACAGTCTGAAATGCTTTTAAAATGGTTTATGTTCCGCACAGATGG	tilapia
63957:	-----	pufferfish
68995:	TAATACAAGGTTAGTGCGTGCTCTGTGCCCGTGTAAAGCCATAAGGTAA	tilapia
63965:	C...G..G.....C.G..T.....	pufferfish
71499:	--	zebrafish_a
69045:	ACGGTAATAGTCCACAGAAATTGTTGGCCCTATCTTGCCTCCATAGTCTC-	tilapia
64015:	G.....C.....A.....T.....	pufferfish
71509:	-----G..G..A..GG-----TCT.CC.....G	zebrafish_a
106161:	TT..G.CT.T-	horn_shark
145121:	C..A..AC-.T..T.T.TT..G.CT.T-	Human
139363:	C..A..AC-.T..T.T.TT..G.CT.T-	Mouse
69094:	---CAGTGTGAGGGCTGCATTGAAAAGTAAGATGGATCGCCACCATTTC	tilapia
64064:	---.....CC..T.....	pufferfish
71536:	CCA..C.....CCGA..T.....A.G.CTT...TC	zebrafish_a
106172:	---TCA.....TT-GCT....G.-.....TTGT.....G	horn_shark
145151:	---.....CTTAGCT....G.-.....TTG.G.GGAGC.C	Human
139393:	---.....CTTAGCT....G.-.....TTG.G.GGAGC.C	Mouse
69141:	TCTC-CTCACAGTGCTTCTTGTA---ACCCTAGGTTACCCAAAGGAGGCC	tilapia
64111:	G.....	pufferfish
71586:	A.C.G.....C..TC.TC.C.C---..G.....T...GTA...C..	zebrafish_a
106217:	C.ATTA.GGTTT..T.....C....CT...G.A.....	horn_shark
145196:	..A.-.G.G.T.C.....C.CC---C.A.C...CTG.G.GG..C...	Human
139438:	..A.-.G.G.T.CA.....CCCCCTC..TC....TG.G.GC..C....	Mouse
69187:	ATTGGCGGAGAGGCGTCACGTGACCACGGGG---TGCCAATGTTATTCTA	tilapia
64157:	A.....A.....	pufferfish
71633:	A.....T.....T...TT---A.....C.....	zebrafish_a
106264:	AA..A.A.A.....A.....C.....	horn_shark
145242:	C.GA.T.....G.....GCG.....GCGC.CT	Human
139487:	C.GA.T.....G.....GCG.....GC.C.CT	Mouse
69234:	CAAGGGTGTCAAGACCCTGTCAGTTTCTGAAATAAATATTGGGAAACGGC	tilapia
64204:	.....	pufferfish
71680:	..A.....G...T.....AAAG.....C.....	zebrafish_a
106310:	T.....GC.....AA.	horn_shark
145292:	..C.....AC.....AG.G..CG..C..G..C.T...AA.	Human
139537:	T.C.....C..T.....AGAG..TG..C.CG..C.T...AT.	Mouse

HoxA3a:1

	69293	69303	69313	69323	69333	
69284:	GAGATGCAAAAGGCAACCTACTACGACAGCTCCGCAATTTACAGTGGCTA					tilapia
64254:	T.....					pufferfish
71730:	G.....G.....G.....CT					zebrafish_a
106360:	A..G..A.....T.....T..G.....T..					horn_shark
145342:	.C.....A..G.....G..G..C..G.....					Human
139587:	.C.....A..G.....A..G..C..G.....					Mouse

HoxA3a:1

	69343	69353	69363	69373	69383	
69334:	CCCATATCAAAGCGCAAATGGCTTCAGTTATGATGCCAATCAGGTCCAAT					tilapia
64304:	A.....					pufferfish
71780:	...T.....C..T..AG.....G.....CAG..G..					zebrafish_a
106410:	.A...C...G..A.....T..T.AC..CA.C...G...CAG...					horn_shark
145392:	...C..C..GGCA..C..C..G..GC...A.....CAG.CG.					Human
139637:	...C..C..GCA..C.....G..GC...CA.....G...CAG.C..					Mouse

HoxA3a:1

	69393	69403	69404	69414	69424	
69384:	ATCCCCGGGCTCTCATGTG-----GAAAGTGAGTACCATCGACCT					tilapia
64354:	A.....					pufferfish
71830:	...T..A...CT....C.....G					zebrafish_a
106460:	...G.CTT.G..C..C.....C..C..T....G..					horn_shark
145442:	.C..GGC.T..G.CGC.T..GGCGCC---.CG.C.....C.....C					Human
139687:	.CG.G.C.T..G.CGC.C..GGCACCGAT.GCGT.....					Mouse

HoxA3a:1

	69434	69444	69454	69465	
69425:	GCCTGCTCCCTGCAGTCTCCTGACGGCTCCGTGGCTT-----TGCA				tilapia
64395:	T.....G.....T.....C-----				pufferfish
71871:	T.....C...GTATA..T.CA.G.C-----				zebrafish_a
106501:	T.....A..A..G.G.A---.T..CC.CC-----AT..				horn_shark
145489:	C.....CTC.A..G..G..GCCACCCCAAGGCA..				Human
139737:	C.....C.C.A..G.T.G..GCCACCCCAAACT..				Mouse

HoxA3a:1

	69475		
69466:	AAAGCCGGGGGAGATG-GC-----		tilapia
64436:	G...G..A.AT.GC.-.-		pufferfish
71912:	C.CAT.CAAT..A...-T-----		zebrafish_a
106539:	C..A..CAAC..T..C-AA-----		horn_shark
145539:	CG.A.T.A.T...GC.T..CTGCGCACCCTGAGCGCCCCACCTAGCCAGC		Human
139787:	TG...T.A.C..AGCTT.TCTGCGCACCC-----		Mouse

HoxA3a:1

69492 69501

69484:	-----GGAGAGCTGCGACAGGA-CCACAGCCA-----	tilapia
64454:	-----A...T...-...G-----	pufferfish
71930:	-----C...GT...C.ACAA.-TT.AC.GA.-----	zebrafish_a
106557:	-----T..A..T...ATGC.A.-...GT...-----	horn_shark
145589:	CTCCAAGCCTG.....C..CC.T.C.C..G.C...G-----	Human
139816:	-----T...C.GCC.TC.TA.T-.AG.CC...GGCCTGGGTGAA-----	Mouse

HoxA3a:1

69517 69531

69510:	-----TTCAGGCGGCGCA-----GTCCAAGGT-----	tilapia
64480:	-----T...T...-----	pufferfish
71956:	-----CA..A...-TA...AAC..AC-----	zebrafish_a
106583:	-----G...AC..AGC...CCA.CCA..-----	horn_shark
145627:	-----CCC...C...CCCCTGCCC.AC..CC-----	Human
139854:	CCACCTTTGCCTCCACCTCCTCCC....A...CCCAGC.C..C..CC-----	Mouse

HoxA3a:1

69537 69547 69557 69567 69577

69532:	TCAT----CCCGAAAGCAATCAACCGCAGGTGCCGGTGTCAAGGCCACCC-----	tilapia
64502:	-----C...T...-----	pufferfish
71976:	A.C-----C.A...A..G..C-----TACTG.C..T-----	zebrafish_a
106605:	.AT.GCAGAG.A.C...-.GAA...CCA..ACCTC..CCA..T..A-----	horn_shark
145656:	G.C.CAGC..GC.CCT..GC.CC.T..CC.A..CC..-C.CG..C..G-----	Human
139904:	..CACAGC...C.CCA..GC.CC.T..GCCCA..CC..-CT..T..G-----	Mouse

HoxA3a:1

69587 69597 69607 69617 69627

69578:	CCTCCCTCACAGTCCCCCGGTGCTATCAGCCAAAACACAAGCAACGGATC-----	tilapia
64548:	C.G..A.....C.....C.....G..-----	pufferfish
72009:	T..GGAC..TC.....A..T.CC.G.AT...TTC...A..TT.AT..-----	zebrafish_a
106654:	..A..AC..TCTGT.T.ACCAC.C-----T..C...G.AAC..-----	horn_shark
145705:	TTCTG..T..CC.C.....G..TG.C...AACC..-----	Human
139953:	GTCTGT.T.TCCCC.....GTG.C.A..G.AACC..-----	Mouse

HoxA3a:1

69637 69647 69658 69668

69628:	CAACCAACCAGCCAGTGCCAAGAACGA-----CTCCCCGACCTCTA-----	tilapia
64598:	G...-C..A.....AG-----A.....G-----	pufferfish
72059:	-----GCC.....TCCAGTCCACGTA..A..A..AC.AT-----	zebrafish_a
106698:	G.C...GT.CAG..CAAG...A..CC-----TA.A.TT....AC-----	horn_shark
145749:	T.C..CTG.CAA.GCG.....G.CC-----CTG.TC.A..AC-----	Human
139997:	T.C..CTG.CAG..CA.....G.CC-----CTG.TC.A...C-----	Mouse

HoxA3a:1

	69675	69685	69695	69705	69715	
69669:	---CCGCTCGCAGCAAGCAGATCTTCCCCGGATGAAGGAATCCCGTCAG					tilapia
64636:	---TT.A..GG.....A..T..T.....T.....					pufferfish
72097:	---.A.A---.G..A..C..T.....T.....G.....					zebrafish_a
106739:	AAG..A.CATT..T..A..A..A.....A..G..G..C..A					horn_shark
145790:	---.A.AGTGGC...A..A.....A..G..T..A..A					Human
140038:	---.A.CGTGG...A..A.....T.....A..G..AA.G...					Mouse

HoxA3a:1

	69725	69735	69745	69755	69765	
69716:	AACACCAAGCAGAAACCCACCAGTAGCTCCAGTTCAGGTA					tilapia
64683:	GC.....A..T.A.....A.A.....AA....C.TC					pufferfish
72141:	...A.....---T..T...TAT..T.....GA.T..					zebrafish_a
106789:	...G.....A.....C..T.....A..G..					horn_shark
145837:	...A.....---C.....C.....					Human
140085:	...T.....---CG.....C.....					Mouse

	69775	69785	69795	69805	
69766:	AAACACGACTGTTCTCTAATATCCACACTCTTTGTTAGCCTGCAA----				tilapia
64733:	C.G-----C..GCAC...G.-G..TT...GA...CA..ATG.TTTT				pufferfish

	69819	69829	69839	69849	69858	
69812:	--CCAGAAAAATTACTCAAGTTTGGTTTAGAGAGGATGCAATGCA-GAAGG					tilapia
64775:	TTT...GGG.....G....A.CCA.A.T..CT.CT.G.T..TT..AA					pufferfish
133857:	.TT.AA..A.					Human

	69868	69878	69888	69898	
69859:	GGGTGAGCAGGTAAGGGCTTACGAGGAAAGGGGGTGGGCCACAAACAG-				tilapia
64820:	TT.G..T..AT.T.ATATC..TA.....G...-				pufferfish
133867:	AA.GA.TGTACA..A..GC..GA...C..ACAA..CA-----T...T				Human

	69917	69927	69937	69947	69957	
69908:	AACAACTACTTCCCCTGGGAAGGTCACAATGGTCAGTTTTCTGCGTCTGTG					tilapia
64849:	-----T..T.....G..T....CC.CT..T.AA.A.-					pufferfish
133910:	...G.G.....					Human

	69967	69977	69987	69997	70007	
69958:	ACAGGAAGTTGTTAAATGTTTTAAATCATTAATAATCAGTGTGTCATGGA					tilapia
64879:	---TT.....T.....C....A.----CCA.					pufferfish

	70017	70027	70037	70047	70057	
70008:	ATTACATTGCTAGTGCTGTAATGTATAATCACCATAATCCCACACATACC					tilapia
64905:	.AC.T..CTA..CCT..A..GA..G.T.CTTGT..T.....					pufferfish

	70067	70077	70087	70097	70107	
70058:	CTTTACTATTACAGTTATTTATTCTACACTGCAATTGTAGTGAAGTGCAG					tilapia
64949:	-----A.....TG..ATA.....CC.....A.ATG.					pufferfish

	70117	70127	70137	70147	70157	
70108:	TGTAAACTGACAGACTGGCTACATTGCATCCTGGTCAAAATCTGTAAGGA					tilapia
64979:	.A.....CA...T..C.-.TC.G.....					pufferfish

	70167	70177	70187	70197	70207	
70158:	CTGTTACAAATTATTTGCGCAATATGACGTTTTAGTCTGCGGAAAAACTG					tilapia pufferfish
65008:	..C.C...-----TC.CAA..ACC.CTA.---T.....G..					
	70216	70226	70236	70246	70256	
70208:	TATGCCAC-ATTAACAGTAGCTCTCACCATTTGTTGTCTCTTTTGCCCTG					tilapia pufferfish
65046:	.GC.GTT.G.C.G.A.....A....T.GCCAA..C...-G.....					
	70266	70276	70286	70296	70306	
70257:	CAGCTGACCTGTCCCTACTGTAAACACACCTCTCCACTGATCACATAATG					tilapia pufferfish
65092:	T.....G.AC....GT.....CG...					
	70316	70326		70340	70350	
70307:	GTCCTGGACAGACAACAAACACACAC-----AACAGTTGTTTCAGTTTG					tilapia pufferfish
65142:	T...CA..GT.....C...A....GCAGAA.....G..CGC..					
	70360	70370	70380	70390	70400	
70351:	TCCTGCTGTTTTGATTAGCGAAAAACTCTGTGGGTCAGTGTGCATGTGTG					tilapia pufferfish Human
65192:	..T....					
139677:	TG....G..					
	70410	70420	70430	70440	70450	
70401:	GGAGTTGGTCCGTAGGGGGGTATTTACTTAGAGGAAAGCTAAACATTTG					tilapia Human
139690:	.A..G....GG..G..TA...G.A..TA.G.					
	70460	70470	70480	70490	70500	
70451:	AAATGCACATCTTCCCACGAACTTCTTATTTTGTAATTCAGTGGCTATA					tilapia
	70510	70520	70530	70540	70550	
70501:	TGCTTTAATTTTCGGTATGCAGGTTACAGTGCAGTACAGAAAGCAAAGGCG					tilapia
	70560	70570	70580	70590	70600	
70551:	CGTGGCTCAATGAGTATCAGGAGAGGTGTTTTTTTGTTTTTTTTTAACA					tilapia
	70610	70620	70630	70640	70650	
70601:	ATCCGTA AAAAAGTCCCAACCTTTACGCACGTTTCATGCACGCAAGGTAGA					tilapia
	70660	70670	70680	70690	70700	
70651:	ACCTGGTGTTTTGACGCCAGGGACATTCAGGGTCAGGGGTCTGAGTTTA					tilapia
	70710	70720	70730	70740	70750	
70701:	GCTCTGGGTAGTCAACATTTACTTCCTTTCTGTAAAAATAAATGGATAAT					tilapia
	70760	70770	70780	70790	70800	
70751:	AATCTAATGACATTCCAGGATCTTATCAAGTGCAATCGCTGAACTGCAAG					tilapia
	70810	70820	70830	70840	70850	
70801:	GCAGTGTGGCGCTTTTTCATTAAGTTTAGTTATTTCAAGTGCAAGGTT					tilapia

70860	70870	70880	70890	70900	
70851:	TTTTAATTTGTTTTCAACATCACATAGCCGATTTATGGAAACCCTTGATG				tilapia
70910	70920	70930	70940	70950	
70901:	CACGTTCAAGGCTTATAAGAAGGGCAAATCTTATTATTGAGATCTCATTG				tilapia
96195:		G..T..CTA...G.T.C.			horn_shark
129031:		.GC.....T			Mouse
70960	70970	70980	70990	71000	
70951:	TCAAGATGAGGACACTGTTGTGGTTTGAAGAGTCTTATTTTACTTCCAT				tilapia
96218:	.T.T...A.ATG...ACCAA..A.A....A....				horn_shark
129050:	.T.CATCT.A..A.T..C..				Mouse
71010	71020	71030	71040	71050	
71001:	AACGAAGAGTTAATTTTCAGAATTGCTTTCAAAGACCTTTCGTGAACTGGT				tilapia
71060	71070	71080	71090	71100	
71051:	GGATTTTCTTAATAAATTAAGCAGCAGTCTTCAGTGAATGCGCAATGCGC				tilapia
71110	71120	71130	71140	71150	
71101:	ATAGCTTTGTACGCTGTTAAGAAGTCTTCAGGACGTATACAACATATAA				tilapia
71160	71170	71180	71190	71200	
71151:	AAACCCAGGCCTTTATAAACAATTTTGGAAAGCCCTTTACATTTTACGCAG				tilapia
71210	71220	71230	71240	71250	
71201:	ATACTAATTCAGATACCGCTTTGTTCACGTAGCGACAATCAAACATTCA				tilapia
71260	71270	71280	71290	71300	
71251:	AAGCTCTTCATCTTTACTTAGTTTCACTGTTTAAGTAGTTAAAATGCAAA				tilapia
71310	71320	71330	71340	71350	
71301:	GCAGACTGGTTTCAACCTGAATTGTGCTTGGGAGGGTGTGTTAATGACTT				tilapia
71360	71370	71380	71390	71400	
71351:	TGAATAACGCCCGGAGCTTCCAGTATTTATCAGAAAAAGAATTTATACGC				tilapia
71410	71420	71430	71440	71450	
71401:	ACCTGTTACTCACGAAGGAAAGATGCACAGTGCTTCACACATGCGTTACA				tilapia
71460	71470	71480	71490	71500	
71451:	CATACGCTTCATTTCAGCACCTTTTCATGACCTAAACTAAGAGGCCTTTTGA				tilapia
103178:		.T.....GA.....C			zebrafish_a
71510	71520	71530	71540	71550	
71501:	AAATCAAGTAGTCAAAAAAAAAAGTAAACTAAACTGTAATAATCGCGTGAT				tilapia
103195:	...CACTA..CAACG.....A.....A....A.AA..C.C..				zebrafish_a

71551:	71560 71570 71580 71590 71600 TCTAAAGCATTACGTCAAATTTACGGGATCACTTCTTTCTCATCCATAAC	tilapia
71601: 65836:	71610 71620 71630 71640 71650 ATAACACAATGGACCAGATTATGTCATCCTGCATTGCTATTACTTTAGGT ..C.	tilapia pufferfish
71651: 65840:	71660 71668 71678 71688 71698 TTGGGCGAAAGG--TAGTGATAGTTATTAAATGTTGGCCGCCTGCCATAA C.A..T..C...AAC.A...C.T.....TGGC.....GT.....G	tilapia pufferfish
71699: 65890:	71707 71717 71727 71737 71747 CAG-TAAGTAGACTAGCACCTTGCAATTCTGCAGCCAAGATCCAGCCTCT .G.T....C....C.AAGTT....C..AT.....C.TT.AG	tilapia pufferfish
71748: 65936:	71752 71762 71772 71782 71792 TA-----AGCTTATCAGTGAGGGCAAGGCGAACTGTTTTATATATACCCT G.GTGGGG.....AT....C...G.A.C...--CG.G...	tilapia pufferfish
71793: 65984:	71802 71812 71822 71832 71842 GAGGAATGCATAATGCTTGTTGTTTGCATTATGTGTGAGCTACCCTGCAAC .GA....A..A.....C.....T---G.T.C-TG..	tilapia pufferfish
71843: 66030:	71852 71862 71872 71882 71892 TATGGGGGGAAATGAGGGTCAAGATGTTTTAGTAGTAAACCTGAGGTTAC G.C..A..A.G.....A...C.....G...T.....	tilapia pufferfish
71893: 66080: 131825:	71902 71911 71921 71931 71941 CTGATTCCATAT-CACATACTGAGCCATTATTGTCCAGTTGCACTTTTTG .C.GC.T....AT.G...A...CTT.C.G...C...G...A.G-C...CA....GA	tilapia pufferfish Mouse
71942: 66129: 131831:	71951 71961 71971 71981 71991 CTTTGCAGTCTGTGAAGCTGTGCATGTGACTAGTTGGCTCATGGAGCCTT ...ACA.T.TCAA..CA.GA.CTT.CCA.AAG.G.T.G.TGG..G.---- ...GA.G...G....G.T..A.....C.	tilapia pufferfish Mouse
71992: 66175:	72001 72011 72021 72031 72041 GATGATAACTCCTGTGATTTGCCATAGGGGAGTGGGTTTATTAGATATAT -----G.G....ATGC.A...G.	tilapia pufferfish
72042: 66199:	72051 72061 72074 72084 TGAGATGTTTGGAACATATGCGCATA-----CGCACGTTATTAGTGTT C.-----A....TTATT..AGGTGATT....ACC..CTC.---	tilapia pufferfish
72085: 66240:	72094 72104 72114 72124 72134 ACTGATCATTTGTGATACATATTTAAGTGGGCAAACCTTATTTAGTAAACTA -.C.T.....	tilapia pufferfish

	72144	72154	72164	72174	72184	
72135:	CTCAGTCAACACCACCGCCCTCTGATCGCAGTTTGCTAACAGCTATG					tilapia
66255:	-----G....A...T...T...T--.T					pufferfish
	72194	72204	72214	72224	72234	
72185:	TGTGTGACATGATGTCGCTTTCACTCTCCTGTCTTTGCCTCTGTACCTC					tilapia
66275:	C.....C..GC.-.T.TA.....TC..C.C.CC...T...C.....G					pufferfish
107115:	C....T.CC...C.C..C.CTCT....					horn_shark
140473:	T...T..T.....TT....T.CTT..					Human
	72250	72260	72266	72276		
72235:	TCTCTTT----ATAACGAATTACTGACTGACA----TCCTCCTCTCCTTC				tilapia	
66324:	A.C.CC.GACTG...T.G.....T.....----C.....				pufferfish	
107147:	.....				horn_shark	
108839:	A.TG.T.T...-				horn_shark	
147242:	..T.....TC.-				Human	
140505:	.....				Human	
141464:	CCGC..T.....TG.-				Mouse	

HoxA3a:2

	72286	72296	72306	72316	72326	
72277:	ATCCTGACAGTGGAGAGTTGCCCCGAGACAAAAGCCCTCCGGGGTCAGC					tilapia
66370:	TCA.....T.....G..T.....					pufferfish
72778:	A....C...G.T.....T..C..T..T..G..					zebrafish_a
108853:	-.AT.T....T..A....CGG.T....A..T.....CC....					horn_shark
147255:	G....CG...GC..A..C...G.T..C....G....G....CAG..					Human
141487:	G....G...G.....C...G.T..T....G....G..T..CAG..					Mouse

HoxA3a:2

	72336	72346	72356	72366	72376	
72327:	AGCATCAAAGAGGGCCCGGACAGCTTACACTAGCGCTCAGCTTGTGGAAC					tilapia
66420:	G....G....A.....G....C..T.G....G..					pufferfish
72822:	C..C..T...C.C..A..T..T..A....ATCT....A..C....GT					zebrafish_a
108902:	C---.C.....A..C....A..T..C..T..C..T.G.....					horn_shark
147305:	TT.G..C...C.C..G..C..G..C....G....G....G....G..					Human
141537:	CT.G..C...C.C..G..C..G..G....G....G....G..A..G..					Mouse

HoxA3a:2

	72386	72396	72406	72416	72426	
72377:	TGGAGAAGGAGTTCCACTTTAACCGGTACCTCTGCAGACCCCGGAGGGTG					tilapia
66470:	T.....T.....A..					pufferfish
72872:	A.....T.....T.....TC...A..AC..A..A					zebrafish_a
108949:	T.....C.....T.....G..T..A....C					horn_shark
147355:	A.....C.....C.....G..C.G..G..CC....					Human
141587:	C.....C.....A..C.G..G..CC....					Mouse

HoxA3a:2

	72436	72446	72456	72466	72476	
72427:	GAGATGGCGAACCTGCTCAACCTCACAGAGAGACAGATCAAAATCTGGTT					tilapia
66520:	..A....A....T..A.....G..A....A.....					pufferfish
72922:	..A....A..T....T.....G..G..A..G.....T.....A.....					zebrafish_a
108999:	..A....C....CT.A.....T..A.....T.....					horn_shark
147405:	C..T....G.....T..C.C.....G.....					Human
141637:	C.....G.....C..C.C.....G.....					Mouse

HoxA3a:2

	72486	72496	72506	72516	72526	
72477:	CCAGAACCGCAGGATGAAATACAAGAAGGATCAGAAAGGCGTCGGAATGA					tilapia
66570:	T..A..T.....G.....T.C..G....					pufferfish
72972:	T.....G.....A..C.....G..GC.T....					zebrafish_a
109049:	..A..T....A.....A.....CGAAA..C...C					horn_shark
147455:	T..C.C....G....A.....G...AAG..C..C					Human
141687:	C.C....G.....A..C.....G...AAA..C..C					Mouse

HoxA3a:2

	72536	72546	72553	72563	
72527:	TGCCTTCTCCCGGTGGACAGTCCCGG---CGCAGTCCCGTGGGCCCA---				tilapia
66620:	C.....T..C..G.....C---A.....GGC				pufferfish
73022:	...A....T..A.C.....T..T---A..C..A..ATC.TTG---				zebrafish_a
109099:	.AA.A..CT.T..A.....G..CTGCA.A..C..A.T-----				horn_shark
147505:	.AA.G..AT.G..G..C.....T..AAGT....C.....				Human
141737:	..A.C..GT.T..G..C.....AAGT..G..C..T.....				Mouse

HoxA3a:2

	72580	72590	72600	72610	72620	
72571:	GCTTCCGGTGCCGGCGGTGGCGGTGTGGGAGGCGGATACCTCAACTCTAT					tilapia
66667:	T.CA....C..A..A..C..T..A-----					pufferfish
73066:	T.A....G.G..A..A..G...GAA.T.CA---TT.A.GT..A..					zebrafish_a
109143:	C.A..A.C..A..A..A-----TGCA.....					horn_shark
147546:	C.CC....A....T..C-----T..G.....					Human
141778:	C..C.....A..A..C-----T..G..T.....					Mouse

HoxA3a:2

	72630	72640	72650	72660	72670	
72621:	GCATTCTCTCGTAAACAGTGTTCATATGAATCCCAGTCGCCGAATTCTT					tilapia
66705:	T.....A..T.T.....A....CG....					pufferfish
73113:	T.G.....C..AA.C..C..C..A.CC..T..AGCA..G..					zebrafish_a
109175:	CT.G.C..C....C.....C..CC.G..C.....T.CG..C..					horn_shark
147578:	G..G..C....C..C..G....GC.....CCCGC..C..					Human
141810:	G..G..C....C.....GC.....A..CCC..C....					Mouse

HoxA3a:2

	72680	72690	72700	72710	72720	
72671:	ACAGTAAACCTCATCAAAACGCATACGGTATGCCTACGTCATACCCCCCT					tilapia
66755:	...A.....T.....G.C.....					pufferfish
73163:	.T.AC.....ATCT..TA.....A.CC.T.....T...					zebrafish_a
109225:	T...C.....C..T.C...C.....T.---T...					horn_shark
147628:	T.TCC..G..C.CC..GGGTA.C....GC....CC.CG.C.C.TA...					Human
141860:	T.TCC..G....CC...GG...C..T..GT.....C..G.C.C.TA...					Mouse

HoxA3a:2

	72730	72740	72751	72761	
72721:	CCTTTAAATAA ACTCCCTCAACA ACTGC-----CCGCCCTCCAGAA				tilapia
66805:	...C.G.GC.G....A.....A.....				pufferfish
73210:	-----C.T..G.....TC.A....				zebrafish_a
109272:	GGG-----C.T..A....GT.....A..TC.A....				horn_shark
147678:	G.G-----GCC..G...GCACCCCG..A..C.A....				Human
141910:	G.....C...GCC..G...GCTCCCCA..T..C.A....				Mouse

HoxA3a:2

	72776	72792	72802	
72762:	GAGGTATCC-----CGGGAACGACTCT----GCCACGCCCGAGTATGACG			tilapia
66846:	G-----CT..T..G-----A.....			pufferfish
73239:	.C.....A-----G..A.CT.GTA.A-----T..A..A..C...A			zebrafish_a
109304:	G-----CG.CAG-----TG....T..A.....A			horn_shark
147719:	.C.C..CA.GGCGG.A..GG..GGCGCAGGG.G...C....C.....C			Human
141951:	AC.C..CA.AGCGG...GT.AGGCGCAGGG.G...C..T..C..C...C			Mouse

HoxA3a:2

	72816	72826	72843	
72803:	CGCATCC-----CCTCCAAGGCAATGGCAGTTACGGGA---CGCACATG			tilapia
66887:	TT.G.....C.....			pufferfish
73280:	A-----TA.A.....CAA..A.....A-----AG..			zebrafish_a
109345:	T..T.....G...T...CTC.T..TT.A			horn_shark
147769:	...CG.TCATGG..G..G....C....C..T...CCC.A....A			Human
142001:	G.TCACGG..G..G.....C..T...CCC.A...T.A			Mouse

HoxA3a:2

	72853	72863	72867	72877	72887	
72844:	CAAGGCAGCCCTGTTTATGT-----CGGCGGAGGTTACATCGACTCAAT					tilapia
66928:	T....C.....T....C.....G.					pufferfish
73321:	..G.....C.....CAGTGG..T.....TCG..T..TT.					zebrafish_a
109389:	..G..T....A..C.....T..A...AAC.TTG.G..A..C..					horn_shark
147819:	..G..A....C..C.TC-----G..G..CA.C..TG.G..GC.C..					Human
142051:	..G..A....C..C.TC-----A..G..CA.C..TG.G..GC.C..					Mouse

HoxA3a:2
→

	72897	72907	72917	72927	72937	
72888:	GCCCAGTTCTGGGGCCTCTGTTTTCGGTCTGACCCACCTTACGCACCCAC					tilapia
66972:	A....A.....AG...G.....G..A.....CC....T..G.					pufferfish
73371:	.GTGG..ATG.....G.....T..C.....G.....AC....T...T					zebrafish_a
109433:	...G..C.....C.T..CC....A.C..A.....CGGT..T..T.					horn_shark
147863:	.AG..AC..C...C.AG.CC.C..T....A..T.....CC.C...G.TG					Human
142095:	.AG..AC.....C---.AC.C..T..C..A..T.....CC.C...A.CA					Mouse

HoxA3a:2
→

	72947	72957	72967	72977	72987	
72938:	CGTCCGCAAACATGGAGTATAATGGAGCAATCACAATGGGTAACAGTCAG					tilapia
67022:	C..C.....C.....C.....A					pufferfish
73421:	.TCAA.GC..T..A..C..C.....C..T..T..C.....A.....C..T					zebrafish_a
109483:	.C..T.G.....C.....T...GGGC.....ACC.G..AC..T					horn_shark
147913:	.C..G.GCGC.....C...GGG..T..CGGGC.GC...C.G.G.C..C					Human
142142:	.C..G..TGC.....C..CGGG..CA.TGGGC.GC...C.G.G.A..C					Mouse

HoxA3a:2
→

	72997	73001	73011	73018	73028	
72988:	CATCACGGAGTG-----TGTGATCCAACACC---GACGTACACAGACCT					tilapia
67072:	T..C.....G.....					pufferfish
73471:	..G..A....CA-----..C...T...AC..ATGC..A.T.....T.					zebrafish_a
109533:	..C..T...CCT-----..C..C...CAT....C..A.....					horn_shark
147963:	.C.....GCC.GGGCCTG.G..G..GCAC....C..C.....G.....					Human
142192:	..C..T..GCC.GGGCCTG.G..G..CAC....C..C.....G.....					Mouse

HoxA3a:2
→

	73038	73045	73055	73065	73075	
73029:	AACGCCGCACTAC---TCTCAGGGAAGAATCCAGGAAGCGCCCAAACCTGA					tilapia
67113:	T.....---.....T.....T.					pufferfish
73515:	...A..A....T---.....T.....A.....					zebrafish_a
109574:	TT.TT....C.TCCG.....T.....T....G....					horn_shark
148010:	T..CGGC...C.TCCT.....T.....A....G..C.					Human
142239:	T..TG.C...C.TCCT.....T.....G..C.					Mouse

HoxA3a:2
→

	73085	73102	73107	
73076:	CGCATCTGTAGCA--GTGG-----CGCTGCCTGGA-----TCAC			tilapia
67160:	T....AGCT...GCT-----			pufferfish
73562:	T.A...TG--.C.			zebrafish_a
109624:	.C.....ATG-----..A.CA.T-----AG.			horn_shark
148060:	.C..C....GAT--...GCTTGGGGCTA...A...GAGTC..C.			Human
142289:	.C..C....GATG--A...GCCAGGGCTGT.A...A...GAG--TG.			Mouse

HoxA3a:2
→

	73117	73127	73137	73145	73155	
73108:	TCCGCCCATTTGTCTTATCCACCTCCAGACA--TATTACTGCTTTGTTTCT					tilapia
67193:	AA.G....G--C....C....C....C					pufferfish
109648:	-----TGGTG.....C...TTC.CA-----					horn_shark
148107:	C..A....CCT.T..T-----TTG.TTGCT.T..TT.TT..T..T.					Human
142334:	C.AC..G.CCT...T-----GG....TT..CC...T.					Mouse

	73165	73175	73185	73195	73205	
73156:	GCGCCTCCTCACGGCTCCCACCATCTCTCTGCTTTTGTATGTTCCCTA					tilapia
67241:	A...T.GT..G..T.....T.CA.....TT.--					pufferfish
109673:	--..T.TG...T.TTAT.T.....A...CA.....					horn_shark
148152:	TA.GT..T..CT.C.CTTTC.TTC..TC..TT.C.CT					Human
141104:	C.A..TT..T					Human
142368:	TT.TT.TG.TCTATG.T.TTG.C.T..C..TT.C.CC.C.GCACC..T--					Mouse

	73215	73225		73237	
73206:	TAGTTTTTTCCCCCTTTTTATTTTTTTGG-----TGT				tilapia
67289:	-----TA.AG....A-----				pufferfish
109704:	----.C.....C..CC.....				horn_shark
148247:	AGTT.A.				Human
141117:	.CT..C.....TTT.....T.....C.				Human
142416:	-----C..T.A....GT...C....TAATGCGTTTTTATAGTT.A.				Mouse

	73247	73257	73267	73279	
73238:	GTGAAGTAGCGTAGGAAAAATAATCACGACTTGCTTGAA-----TTT				tilapia
67302:	AA.....T.....A..ATTTTCTCC..				pufferfish
148254:	C.....TT.G-----				Human
142458:	C.....TT.G-----				Mouse

	73289	73295	73304	73314	
73280:	GCTCGTGTCAATTGTC----TCA-CACAGACCTTTATCT-----GG				tilapia
67352:	A.....A.....A-----				pufferfish
148274:	...G.AA.GGC...A-----T.GC..TA.....				Human
141958:	..				Human
142478:	...G.AAAGGC...AGTA...GT.GCA..A...C.ACCACCCCTCCTC				Mouse

	73324	73332	73342	73347	73351	
73315:	GCTGTAGGCGGG--AGGGGAGGGAGGGGGGC-----GCAGTA-----TA					tilapia
67381:	.T.T....ATTTAGT.....C..ACATA.GCC..TTTAATC.					pufferfish
148332:	..CC.G-----C.					Human
141960:	G.AG..T--G...TG.....A.					Human
142528:	..CC.G.C.TCT--G-----..CC.G-----C.					Mouse

	73361	73371	73381	73391	73401	
73352:	TGCATAGACTTATTTAATCTTTTTTTAATGTTTTCAAATCAAAACTCAA					tilapia
67431:	..AT.TT.T..G...CG.T..A-----TTG..TT....					pufferfish
148340:	CC.T.TAC...C.CC.C.....G...G-----					Human
142549:	.C.T.TTC...C.C..C.....G..A.G-----					Mouse

	73411	73421	73428	73437	73447	
73402:	ACAGGGTATTATGAACACATGTT---ATCCA-TTTTCAATGTGAATTTGT					tilapia
67467:	T.....T.....T.....					pufferfish
148370:	A..T..CTAG..G.G.....					Human
142579:	A.CT..CTAG..G.G.....					Mouse

	73457	73467	73476	73486	73496	
73448:	CCGTCCTCTTATTTATCCGCAGTTGAAG-AATTATGTTTTCTCTCTCTCT					tilapia
67511:	-.A.TT-T.....TC.....-...CG..C...T.T.T.T.T.					pufferfish
103712:	.....					zebrafish_a
109693:	CA..CC....T..C.C					horn_shark
148419:	T.T.A.-A...GGC...CG..GG...CG....CT...T.AAT.T.AA					Human
142628:	T.A.A.-T...GGC...CG..AG...C..C.GC...T.T.T.T.T.AA					Mouse

	73504	73511	73521	73531	73541	
73497:	CTCTT	--TTTTT	---CATTTT	GCA	TTTTGTTGCA	TTATGTGTAAGGGT
67558:	T.T	----	A	-----	A	..A.A.
103725:	C	--.G.G.G	---T	....		
109713:	CC	-----G	A.T	..		
148468:	A.T	-----A	GCA.T.C	....		
142677:	G.T	--AG	TAAA	GCA.T.C	ACTGA	
						tilapia pufferfish zebrafish_a horn_shark Human Mouse

	73551	73561	73571	73581	73591	
73542:	CCTTCAAGAGCCACGAGTTGGAATTAAGAGGGAAAATACGTTTTTCAGAAG					tilapia
67599:	C	G	-----TT	..TT	..G	T.T
						pufferfish

	73601	73611	73621	73631	73641	
73592:	CAAGGGTCATGAGCTTACACGCAACCCCTCCCCTTGCTTGTGTTTGTTC					tilapia
67641:	..G	G	A.G	TC.A	-----	-
						pufferfish

	73651	73661	73671	73681	73691	
73642:	CATTTTTTTGGACTTTTCTAATGTTATTTATTTGTTTGGTGTGAAAGATAA					tilapia
67685:	----	TAG	..A	G	C	A..A.-
						pufferfish

	73701	73711	73721	73731	73740	
73692:	AAGAGTCCTTTAGTATTATTTGACACCCCTCCATCTTTGTGTGGGTA-G					tilapia
67730:	AC	T	TT	TG.G	A.C	..AAACA.C
						pufferfish

	73750	73760	73770	73780		
73741:	AAGGTTGGTGGAAAATTTGCGTCTCGGCCCTTTTTTCAGCCCATACATGT-					tilapia
67780:	.G	T.G.A.G	..A.AATAC	-----	AG	G..A
						pufferfish

	73799	73809	73819	73829	73839	
73790:	TAGTCTGCATTAGCTCCTCAGCAGCAGAAAACCCATGTTCCCTGTTAGAGG					tilapia
67818:	GA	T	T	C	-----GT	..A.C.A..
						pufferfish

	73849	73859	73869	73879	73889	
73840:	CTATGTTTCCATTTTTTTCTTCTTCGAAGGAGGTGTTTTATTTTTCTCAG					tilapia
67864:	...C	ACC	-----AG	..T	-----CC	.....
						pufferfish

	73899	73909	73919	73929	73939	
73890:	CGAATGTAAAAATCAATCAGTCATGCAATAAGGGTGGAAAAGAAGGACAT					tilapia
67911:	-	C	G	-----	..C	-
						pufferfish

	73949	73959	73969	73979	73989	
73940:	ATTACGTTAGCTGTTTCTTTATTGAAGTAATAAGAAACAACTTTTTTTT					tilapia
67955:	--C	A	A	A	GGCA	..C
74204:		..T	..A	..G	..C	..A..T.T..C
148888:						..A.T..T.GA..G
143087:						..A.TG.T.GA..G
						tilapia pufferfish zebrafish_a Human Mouse

	73999	74009	74019	74028	74038	
73990:	CGATGTCATACATTCCATGCTGCTCCAGTTA	-GAACAAAT	AAATAAAAGA			tilapia
68003:	TC-.....C.....C-...G.....AG					pufferfish
74233:	.C....T.G.T.....A.C..CT...A.....					zebrafish_a
148907:	GAGA..TC					Human
145908:	.G....TT.CC...A.G.TA...-AT...T.....A.G...G					Human
143106:	GAGA..TT.....T.....ACA..CT..GA..CA...C....A.					Mouse

	74048	74058	74068	74078	74088	
74039:	ATTGAAATATACCGAAAGCATAGCCTTCGATTTTAATTTAGACTTGGCAG					tilapia
68051:	.A.A.....A.TGC..GCA.A.TC.G.G.A.....-----					pufferfish
74283:	.					zebrafish_a
145949:	.GA.....G.					Human
143156:	.A.A..G.					Mouse

	74098	74108	74118	74128	74133	
74089:	AAGCATTGCACATGATCACAAATCACGAAGTGGACTAAAAAGAA-----T					tilapia
68090:	-GC..CGT.C...T....-----..T.AA.T.C...CCG.ATCCT.					pufferfish

	74143	74153	74163	74173	74183	
74134:	AAATATACATCTTTTCGTTTCTCTGCAATAAAATGGAGGTGAAAAAAAAAA					tilapia
68130:	G.-.T.A.TAT.....-----TG.G..T.C.C...CTC...					pufferfish
146907:				.A....G.T..		Human

	74193	74203	74213	74223	74233	
74184:	TCAGTTTCCAAATATATAGTCAGGCAAATAGACGTAAAAGAAAAGAAACA					tilapia
68171:	C..A..A.AG.T..A.C.A.GC.--.....ATA..GCT.T...T...TAT					pufferfish
146918:	TTG..G.A.....GT...					Human
150992:		...A.A.A.A.....G.				Human

	74243	74253	74263	74273	74283	
74234:	AAAATGTTTTAACAATAATAAATCATAGAGTAGCCTATCACACATATAGA					tilapia
68219:	C...--..G.--.G..A..AG.TA...A.A..-.TTT.....---					pufferfish
151017:	....					Human

	74293	74303	74313	74323	
74284:	GTGGCAATACATTTCTATTTTTTTCATACAACGTAACGTGGAATAT-----				tilapia
68261:	----T..A.....CAC.-----G...A.AC.T.CA...A..ATTAC				pufferfish
88061:	G...A..C..A.CT...T...T...G.C.AT.GC..				zebrafish_b

	74329	74339	74349	74359	74369	
74329:	-----TGGCCATAAATATTATCCAATAACATGCAGGCAAATATTGG					tilapia
68298:	AAAATCCTG.AAT.C..TT...A..-..T.....A..ATA...CGGCC.					pufferfish

	74379	74389	74399	74409	74419	
74370:	CAGATATAGTAAAAATGCGTAATAAATGCTACATTCTTTTTTATTTTATT					tilapia
68347:	-----CAAT..T.G.....-CA..CC.CG....G---					pufferfish

	74429	74439	74449	74459	74469	
74420:	TTATTTTTTTATTTTATTTTCTCCCCTTCACTTGATTGAGGTGAAGAAA					tilapia
68386:	-----T...T....T.....C.....					pufferfish

74479	74489	74499	74509	74519	
74470:	ACTCCAGGGTGGCCCTCTCCCTCCTCTC	ATCTGCGTGGGCACATCCATA			tilapia
68413:	C...TC.....T.T.....				pufferfish
74529	74539	74549	74559	74569	
74520:	ATAATAAAATGTCACCGGGGCCCTTCTGGAGAATCTGCAAGAAGACAAC				tilapia
68463:	A..CT.T.CG.....GT....T..AG....C..				pufferfish
74579	74589	74599	74609	74619	
74570:	AAGCTAAATGAGAAATCGTTTAAAAAATAATCCGCTGATATTTTCAGTCA				tilapia
68513:	...T..C.C.....CG.....T..T.CT...G.GG.....G				pufferfish
103750:	..T...A.....G.T.C..T.C....A..				zebrafish_a
74629	74638	74648	74658	74668	
74620:	GTCAAATGCG-GTCAGAGAGGATACAGTCTGAACTACAATCATAACGCGG				tilapia
68563:	C.A.....G.A.....GA.....G...GT....TA.A.CC.G.....-				pufferfish
74678	74688	74698	74708	74718	
74669:	CTTATTGGTCTCATTATTCTACAGATTTGCAGATGCCAGAGTGGTAAAGC				tilapia
68612:	A.....TT...T-.C...T.GTCT....T..C..-----				pufferfish
74728	74738	74748	74758	74768	
74719:	CAGCTCGGTACGAAGCAGCTCCGTTGTGAAGATGGCTACAACAAAAGGAA				tilapia
68647:	...T.TAACT.C..ATGT.CAT.C.A.T..TC..-----				pufferfish
74778	74788	74798	74806	74816	
74769:	TTATCAATTTAAAAGCTTTTTTTTTTTTAAATGACATTA--TATTCGTTTTA				tilapia
68681:	-----.....TG..A.....AC.C...GA.A..CC....GA.----				pufferfish
74826	74831	74841	74851	74861	
74817:	TTAATTTTATAAA-----ATTAAAAATGTGCTACAAGAAATTATTGTTAGT				tilapia
68721:	-----.....G.TGGATG..T.....A.-----GC...CT..G--				pufferfish
79211:	A.-----.....A...T.				zebrafish_b
74880	74897	74904			
74862:	ATTATCATT-TTAATATCTCTCTTAGA---ATTTTTTCAGGCATTT---				tilapia
68758:	---.ATGCC-...T.T...AC....A.ATT.....TTTT....ATG.				pufferfish
79227:	T...A...T...A.				zebrafish_b
74914	74931	74941	74951		
74905:	CAGTATTTATACATTTCC---AGTATGCAACAGAGACACAGCTGGAGCTA				tilapia
68804:	TTA.G..G....T...T.TCAG.CC..TCT..A.AG.TTTTT..A.AT.C				pufferfish
74961	74971	74981	74991	75001	
74952:	AAAGACTACACTTTGGGTGTGCAATTAACATAAATGTGGACAGTGTATACA				tilapia
68854:	.G----.T.GT..G..A.TCA----.GG..T....CAA.-----				pufferfish
75011	75021	75031	75041	75051	
75002:	TCATTATGTTTAACATGCTCCTTTATTTTCGAAACCGATGTTTACAAGCCT				tilapia
68885:	-.GC...A.....T..A-----				pufferfish

75061	75071	75081	75091	75101	
75052:	ACTTTTTTCTACACTTGCTACATTATTTGCTCTCTTTAATTTTGCCTAA	tilapia			
68901:	-----GT...T...T...ACAT..G..A.-----	pufferfish			
75111	75121	75131	75141	75151	
75102:	ATAATGATAATAATAATAATAATTTTCAGCCCAAAGTATTGATTTAAGTG	tilapia			
68928:	-----GG.GC.....T...T...C....A.G.AA.	pufferfish			
75161	75171	75181	75191	75201	
75152:	GGCATGAACATTACTGGCCCTGACATATGGCTAGCAGGGAAAACTAGAAC	tilapia			
68964:	C..GCA.A.G.....T...T.....CA.T...	pufferfish			
75211	75221	75231	75241	75251	
75202:	AATTGAACCATGGTGTGTCACCTGCAAAAAAAAAAAAAAAAAAAAAAGC	tilapia			
69014:	G.AC.....A.G..G...C.C.	pufferfish			
75261	75271	75281	75291	75301	
75252:	TGATGGATTGAGTATTTCTGCATCCAACACTGCCACACACACAGAGAT	tilapia			
69567:	ACA.....C.C.C	pufferfish			
108489:	ACA.....C.C.C	zebrafish_a			
132700:	ACA.....C.C.C	Mouse			
75311	75321	75331	75341		
75302:	CCGCGCACACGCGTGACGCGCTTTAACAACAAGGCAAAGATTTA-----	tilapia			
69094:	GTG.....CTC....GGGCTG	pufferfish			
69591:	A.A.A....A.A.A...A.A.G.AC...	pufferfish			
108513:	A.A.A...G.A.ACA...A.AG.C..G...	zebrafish_a			
132725:	A.A.A....A.ACA...A.A.	Mouse			
75350	75360	75370	75380	75390	
75347:	-----ACCCATAAACAGGTAGCACGCTGATATAGTTTTTAAGTGAAAGAG	tilapia			
69115:	TCTTTC.A.T.....-----	pufferfish			
75406	75416	75426	75436		
75391:	AAGACT----TGGGCATCTTACATCCGTGGGAAAGTGGTTCTAAATCAGT	tilapia			
69139:	..T.T.TTTC.TT.T..T..-...T...A...A.--CC..G..C..A.	pufferfish			
75446	75456	75466	75476	75486	
75437:	CCTGCTATAAAGATAAGTGTGTAGGACAGGCTGGGGTCCACTAAAATGCA	tilapia			
69186:	T...T.CC.-----C...T.....G....A.A.C.G...C-.....C	pufferfish			
75496	75506	75516	75526		
75487:	GCCACCCACTCCTTTTCTTTTACACAAAGCCTGTGCGTAATTCC-----	tilapia			
69230:	A.....A...C...GG.....TAAAAAA	pufferfish			
75540	75550	75560	75570	75580	
75531:	CCCGAAAAAAGTCATCCGTCTTTGCCCTAGCAACTCCGTCCTTCACTCC	tilapia			
69280:	AA.C....C.C....AA...C.T...TG.A..T...T.....A.	pufferfish			
75583	75593	75603	75613		
75581:	G-----CTTTCTAACATGCTACTTAAACGAAAAGTGAA	tilapia			
69330:	AAGGTCTGGGTTCAAAAC.C.C..TG.----CA..G...T..A.TC.	pufferfish			

	75623	75659	
75614:	TGTAGTTTAAACGCATT--GAGAATTCA--AAGATAAAAGCCAGGTGAA		tilapia
69377:	..GC...A...TTA..A.CCAG...CC.GTC..T.....AC.		pufferfish
	75669	75679	75689
75660:	CACGCTGCTTCGCCCTACTCACCGCTGGCGCGTTACCGCCTCCTCATAAA		tilapia
69427:	G.AA.A.....A.....A.....T.....T.-G..		pufferfish
	75719	75729	75742
75710:	AAAGGAAATGGTGGCATCTCGTGTA-----GCTGGATTCTGATTTATC		tilapia
69476:	AC....GAG.C.C.TTTTTTT....CG...C.....		pufferfish
	75762	75772	75782
75753:	TTTTAAATATCCCTCCAGCGACAGCTAGACTATGTCTGTGAACAGAAAC		tilapia
69526:	.C.....G.....CT.G..G..A..CC..G.....		pufferfish
151142:	..T..C.A.A...A.T.T.T.--.A.G..		Human
	75812	75822	75832
75803:	TGGTTCTAATCTGAGGGGCCAGT		tilapia
69576:	T.....		pufferfish
75152:	...T....CC..G.T.....		zebrafish_a
89639:	...A...TCT...GT.....AT		zebrafish_b
112855:	.A...T.-C..T.TTTA.TT.CA...CTG.TCT.C-.T.TGCTC.G.		horn_shark
151169:	.C....CTG..CT.C-.T.TGCTG.G.		Human
145282:			Mouse
	75856	75866	75885
75847:	TGCATTTGATCCGGCAGAGAGTTAGAAGC-CTTAAATGTGTT-GTGAGGG		tilapia
69619:	GG.....-C.....		pufferfish
75173:	A.G.....-TC.AGC.C..C.....TT.A....G..-C.G....		zebrafish_a
89648:	CA...A....TAAGG...T.....T.G-T.....-C.T....		zebrafish_b
112874:	G.T...C..CATT.....-T.....-C..G....		horn_shark
151216:	CA....T..TT.G.AG...C.G....-G.....CT.A....		Human
145310:	CA.....G.TT.G.A.A..C.T....-G.G.....CT.A....		Mouse
	75904	75914	75924
75895:	CACCGAGCTGTCAGACCTTTTGGCGAGTAAGATTGATCGCGCGCAGGCTT		tilapia
69667:	A.....		pufferfish
75221:	---AGT.G.....A.....AT.T..A..C.		zebrafish_a
89696:	...TA.....T.....A..T.....		zebrafish_b
112918:	.CAAA.....C..AC.....A..A..TA...		horn_shark
151264:	.TAGA.....AGG.....T..C.....C..A...		Human
145358:	.CAGA.....GG.....T..C.....A.A.C..A...		Mouse
	75953	75963	75973
75945:	CC-AGGACTCTTTGTTTGGTATATAAGCAACA--AACTGAGAGAAGCC-		tilapia
69717:	...C.....CT.....G....		pufferfish
75267:	---G.A.....A..A..C..CT---.ACT.C.A.C.A.A		zebrafish_a
89746:	...G.....A.....T---.G..CTC..G....		zebrafish_b
112968:	..TTACAG.....CGG.....A.CGG.GGCC.AGA..A..A		horn_shark
151314:	.TTT.GAG.....A..A.....G---.ACT.A.A..C.T-		Human
145408:	..TTCAGAG.....A..A.....G---.ACTG..A..A..C		Mouse

	75997	76007	76017	
75990:	--TACCACTTCTCTTCTTCCATCTCCTACTCACC-----			tilapia
69762:	-----A..T.C....TCC.....TTCCTTACTCTCCCAAT			pufferfish
75311:	AGC..ATT..TC.			zebrafish_a
89791:	-----AC..A..			zebrafish_b
113017:	C-.G.T.T...CA..T.A.TCA			horn_shark
151360:	--C..ATT...			Human
145455:	T-...ATT...C			Mouse
138915:	C..C....C.....C..TGT.TGCCTCCTCTT			Mouse

	76029	76039	76049	76059	76069	
76022:	--GAGCCACTTTTTAAAAAATGAAAATACGGTATGTGCTGACTAACGAAA					tilapia
69810:	AA..CAT.T.....T.....-G.....AAC.....CT...-.GC.					pufferfish

	76079	76089	76099	76109	76118	
76070:	AAAAATATCACAAAAGTGGTTTTCACAGATTATTCTGGAAGAGGTAT-GA					tilapia
69857:	.C..GC.C.T.G..C....C..G.G.....CG.T.....G.C...AA.					pufferfish

	76124	76134	76144	76154	76164	
76119:	AACCA----AACACGGCGGGGAAGGGCAATCCAATAACATTTCCATCCGC					tilapia
69907:	CTGC...G.C..A.....A.AC..T..T.G...C...T.G.TA.					pufferfish

	76174	76184	76194	76213	
76165:	ATAATAACGCTGCAAATGGATTCTGTTGTAAGTGGTCGAT-TGTAAGTGTG				tilapia
69957:	CT..C.CT.....TG.T.....C.A.T..GA..A..C.TTAT..				pufferfish

	76223	76233	76243	76253	76263	
76214:	TTTGCTTCATTGCAATTTCAAGGTAGAAATGATAATGGGAATACAATGAGA					tilapia
70007:	G..T.A..T.....G.AC.T.TC.CC...AT.C...GAC.AC					pufferfish

	76273	76283	76293	76303	76313	
76264:	GGCTTTTCTCAGCACTGTAACCAAGTGCCCTTCCAATAAAATCCAGATTTAG					tilapia
70057:	A..A.C....CC..T.AC.C.T.C..T---T..T---C.T...T....					pufferfish

	76323	76333	76343	76353	76363	
76314:	CCCGTGGAGTGGCTTCCTGCTTAATATGAAAAAGGAACCGTTTCAAAGAT					tilapia
70101:	-----.....T.AAAAC.TG.CC.C...TA.T.TT..G....T..					pufferfish

	76373	76383	76393	76403	76413	
76364:	GTGAGAAGGCAGTAATTATGGTAGATTTTATGTTATCGAAAATTGTGACCA					tilapia
70143:	T.-----C..GG...GATG..G.AC...AT.G..A...-----					pufferfish

	76423	76433	76443	76453	76463	
76414:	ACACCAACAATGATAATAAAAGAAAGAGCTCCTGTGGGTTTACTATAATA					tilapia
70176:	-----G.-----.....T.T..GC.					pufferfish

	76473	76483	76493	76503	76513	
76464:	TTTGTTAGTAGCTGCACGCACACGAGCGTGCATGACCTCGTTATAATACC					tilapia
70192:	A..T.C.A.-----					pufferfish

76514:	TTTTTGTGGAATAAACGAACTCCTATGTGCCTTAATATCATATCTGTCA	tilapia
70201:	-----T....CG-....A..GG...GT..A....	pufferfish
76564:	AGTCAGCATAAAAAGCCTATAATAATAATA-ATAATCATAATAATAACAA	tilapia
70228:	---..TT.....ATA....CATT.....C.G.G..G..T.CGA..T.G	pufferfish
76613:	TAATAACACTGTTTGTGAGCGCATACGCATAACACATGCCGTGTGTGTCCC	tilapia
70275:	----GGT...T.C...-...TA...T.T.CT.A....	pufferfish
76663:	TGCGCAAATTTCTACACAATAGCTGTAAATGTTCAACCACTGTTATGGGT	tilapia
70307:	-----	pufferfish
76713:	TGGTGAATGGTCTGAACGTGCCATATCTGTCAGTATTAACCTTTATGGAT	tilapia
70315:	CAAA....A.T....TA...TA.....G.....A.....	pufferfish
76763:	GGGCCTTTTTATTGCAACACATGCCAGCGGATGCACTGCATATGTCATTA	tilapia
70365:	T.--TA.....T.GG.A...T..A-----....G..T...C..	pufferfish
76813:	TTATGAAACCTTTAAAGAATCACAT-TCATTCTGGTGTCCACACTCACCT	tilapia
70404:	..CC-.C.T.....C.....C..T.C.....AATGGA-----	pufferfish
76862:	CACAGCGAACAGACTGGATTGTTGTGG---TTTGTCTCTG-----TCG	tilapia
70445:	A....	pufferfish
70212:	...A..A...GCC...C....AGGGATCT...	pufferfish
76902:	AGAAATCTCAAAATCAGTTTGTGAGCGTTTCATTTTTTTTCCACCTCTGAA	tilapia
70244:	AG...C.C.AG.AA.AT.GG..GCAA.C.C.T..G...G...	pufferfish
76952:	GGCTGACTCTTGATTGTATGAATAGCTGGGCTACTGGCGTGAAATGTGTG	tilapia
70481:	.C.....C.-----.....T....AA.....	pufferfish
70294:	.A..	pufferfish
77002:	TGCGGT	tilapia
70515:	..C.-----C....GT...T...C.....C.....C.....	pufferfish
77052:	GTGTGGTGTGTGGTGGGGCGTTCTCCACTGACATCCTCAAACAATACGA	tilapia
28337:	CTA..C...C.....	striped_bass
70557:	-----..C.....G.....	pufferfish

	77111	77121	77131	77140	77150	
77102:	GAAAGAGGAGT	GCACGAATCCGCGCACCCAG	-GCTGTGCTCTTTCCCTGT			tilapia
28364:	C.G.AGT..					striped_bass
70596:	.....	C.A....	G....	C.....		pufferfish

	77160	77170	77179	77189	77199	
77151:	AATAGTGAGCGCGTCAGCCATTCTT	-AAAAAACACATTTTGTAGCTTAGT				tilapia
70646:	...G.....	A.....				pufferfish

	77209	77218	77228	77238	77248	
77200:	GGAGTGGACT	-GCAGGGCGCGAGGAGGATAAACTCAGCAGAC	AAAGATGT			tilapia
70694:	...C.....	G.AG.A...A.....	G....			pufferfish
90498:	..AAT..	-A.G.A...A.CA.C..GC.....	G.C.--.T...	TGC..		zebrafish_b
113939:				...AG..G		horn_shark
153126:				..A...AG...		Human
147238:				...AG...		Mouse

	77256	77266	77276	77286	77296	
77249:	AAATATA--	AACAGTCGTCCCCCCCAGCTGAGCGAGGCGTTCTTCACCA				tilapia
70744:	A.--	G.....	A.....	T.T		pufferfish
76220:			...A.T..A...GC...AA.			zebrafish_a
90542:	A.CT.G.--	C.....	A--T.....	C..T.GG		zebrafish_b
113947:	CA.--	-CT.CTGG..TTG.AT----	TC..T..G			horn_shark
153137:	A.--GC.--	CTGG.....AT----	C.TC..G			Human
147246:	A.--GC.--	ATGG.....AT----	C.TT.TG			Mouse

	77302	77312	77322	77332	77342	
77297:	GAG----	TTTTGGATCAATCAGGCAGACAGTGGCTTCTTTTGATTAAACC				tilapia
70787:	...TTTT	T.....				pufferfish
76241:	A.--TTC.AC...	TG.C.--TGA...T.....	A.....			zebrafish_a
90584:	ACT---T....	C.....CA.....				zebrafish_b
113989:	ACT----	CAT.....C.....				horn_shark
153178:	ACT---T.....	AA.....	G.			Human
147287:	ACT---T.....	AA.....	G.			Mouse

	77352	77362	77372	77382	77392	
77343:	CCAAATTGTCATTGGGCAGAGGTAATCATGTGACAGGCAATT	CGGTCCAA				tilapia
70837:	.....	C.T.....				pufferfish
76277:	A...C..C...CA..T.AT.....	TC..CA.				zebrafish_a
90631:	.....	A.....A.....				zebrafish_b
114035:	.....	C.C.....CG.....				horn_shark
153225:	.....	A.C.....C.....				Human
147334:	.....	A.C.....C.....				Mouse

	77402	77412	77422	77432	77442	
77393:	TTTCAACCTTGTCTCCATGAATTCAATAGTTTAATAGCAGCTCGGTCCCC					tilapia
70887:	.....	T...T.....				pufferfish
90681:	.....	AG.....G...C.G.....				zebrafish_b
114085:	.....	T...A.....				horn_shark
153275:	.....	T...G.....				Human
147384:	.....	T...G.....				Mouse

	77452	77462	77472	77482	77492	
77443:	ATACGGCCGTAAATCAGTGAAATAGAAAAAAAAAAAAACATTACAAGGAGAT					tilapia
70937:	.C...A..A.....T.....C.C-----CACG.GAAGAT.					pufferfish
90731:	CA.....T.....					zebrafish_b
114135:	T.....T.....-----CAG..G					horn_shark
99315:	TC					horn_shark
153325:	T.....T.....C.CC.-.AG..GC..T..					Human
147434:	T.....T.....C.CC.-CAG..GC..TC.					Mouse

	77503	77513	
77493:	TTTTTTGA-----TGATTTTTTTTTCT-----TTTTC-		tilapia
70982:	-----AT.....CC.....C.-		pufferfish
90757:	A.CCCGGCACGAT...CA..A.A.....C..C.-		zebrafish_b
99321:	.C..AC.....A.GCG.....C.C.G		horn_shark
153374:	.C.A.GAT-----A.....C..-CTGCGCTCGCCT.....		Human
147483:	.C.A.GAT-----A.....CTTCGCGCTCGCCT.....		Mouse

	77526	77536	77546	77555	77565	
77520:	---GTCATCACTGAGCTGCAACATTTTTTAAAGAAATA-CGCGTGCAAAC					tilapia
71009:	-----TC.CAAG..TG..ACA...CTA...ACAA.....					pufferfish
90793:	-----T...TCA...A-----TT..G.GC-----G..G..T.					zebrafish_b
114219:	CT.					horn_shark
99349:	AAATCATG.....TT..ATG.GCG.A.GCGT.T.					horn_shark
153413:	---C.AGG.CT..CC.CC.C.A.GCCCC.CCA...G.-----G.G..CT.					Human
147523:	---C.GGG.CT..CC.CC.C.A.GCCCC.CCA...G.-----G.G..CT.					Mouse

				HoxA2a:1		
	77571	77575	77585	77595	77605	
77566:	TTC----CTC-----GGCTCTCAGGGAGAGGAGATGAATTACGAATTCTG					tilapia
71049:	T.....T.....					pufferfish
76459:	T.					zebrafish_a
90822:	.G.AAGA..T-----G.....					zebrafish_b
114224:	.CT----.C.--CCTAC.T..GT..AGAC..CA.....T.					horn_shark
153455:	..T----..TGAGGG...CA...AGA...CC.....T.					Human
147565:	CGAGGG...CA...AGA...CC.....T.					Mouse

				HoxA2a:1		
	77615	77625	77635	77645	77655	
77606:	AGCGAGAGAGCGGTTTTATCAATAGTCAGCCGTCGCTTGCTGAGTGCCTG					tilapia
71089:	.....					pufferfish
76463:	T...CG.....G..A...C..G...AT..					zebrafish_a
90855:	CG.....C.....					zebrafish_b
114268:	.A....A.TT.....					horn_shark
153501:	TT.....C.....C.....					Human
147611:	TT.....C.....C.....					Mouse

				HoxA2a:1		
	77665	77675	77684	77694	77704	
77656:	ACATCTTTCCCCCTGTCGCTGATTCA-TTTCAAAGTTCATCAATCAAGA					tilapia
71139:	G.....					pufferfish
76508:	---...G.TT..T...T.G..G..T.T...G.AG.....AC					zebrafish_a
90905:	T.....G..G.....					zebrafish_b
114318:	T.....G..A..-					horn_shark
153551:	T.....A..-					Human
147661:	T.....A..-					Mouse

HoxA2a:1

	77714	77724	77731	77741	77751	
77705:	GCTCGACGCTTTACAGCCCG---ACACTGATTCCTCCTCCCTTTGAGCAG					tilapia
71188:	T.....A					pufferfish
76555:	...AG.A...A.GAA...TCACC.T..C..C.T.....T.....C					zebrafish_a
90954:	A.T....T.....T.....					zebrafish_b
114367:	A.....A.T....G.....T.....A					horn_shark
153600:	C.....A.T....T.....					Human
147710:	C.....A.T....T.....					Mouse

HoxA2a:1

	77761	77771	77781	
77752:	ACCATTCCCAGCCTCAACCCGGGCAGCCATCCGCGGCA-----			tilapia
71235:	T.....G..T.....			pufferfish
76605:	.A.G...A...T.G.GT.AC..G..T..G.A...C.....			zebrafish_a
91001:	A.....G.....C.....C..T..C.....			zebrafish_b
114414:	C.....G..T..CA...T..C..T..C.....			horn_shark
153647:	G.....C.....T..C..T..C..CGGCGCTGG---			Human
147757:	G.....T..C..T..C..CGGCGCTGGCGT			Mouse

HoxA2a:1

	77796	77806	77820	77830	
77790:	---TGGCCCGCCTAGACACAGCCCCG-----ACGGATGCAGCCCCGCTGC				tilapia
71273:	---C.....C.....A.....T.....				pufferfish
76643:	---TAG.....C.G..T...TTAA-----TT.TGAA....AT...				zebrafish_a
91039:	---CA.....C.AG..G.A..TA-----T..C.CAT.....				zebrafish_b
114452:	---AA.....A.A...G.....AA-----T..CACA....TT.A.				horn_shark
153694:	---C.....C..C.AG.CG.....CGGGCAG.C.CG.....G...				Human
147807:	TGGC.....C..C.AGTCG.....CGGGCAGTC.CG.....G...				Mouse

HoxA2a:1

	77840	77850	77857	77867	77877	
77831:	CTACCGCCTCCTTACCCCCG---GAGTACCCATGGATGCGGGAGAAGAAA					tilapia
71314:	.C..A.....T.....T..C.....A.....					pufferfish
76684:	ACG..AGT.GTC..AAA..T-----TC...A..T					zebrafish_a
91080:	..G...A.....A---.....T.....AA.....A...					zebrafish_b
114493:	.AG...GA.TC...T....A.....C.....AAA.....A...					horn_shark
153741:	.CG...G.G..C.G.AG...CCC.....C.....AA.....G					Human
147857:	..G...G.G..C.G.AG...CCT....T..C.....AA.....G					Mouse

HoxA2a:1

	77887	77894	77904	77914	77924	
77878:	GCCTCCAAGAGGAAC---CACCTGCCGACTTCCACTGCTACTACCATCTC					tilapia
71361:	A.....AC.....CA.....					pufferfish
76721:	A..AA.....AA.TT-----G.C.TT.CA.AGGA.TGGGT.A					zebrafish_a
91127:	..A.....AA.....A.A.A.....G..A..GG.A...C.GA					zebrafish_b
114540:	AA.....A...T---.....TG...TT...GAC.CG.AGCA..					horn_shark
153791:	..GG.....AA.C.GCA.TT.....G.CG..G.C..CG.CG...C.G.					Human
147907:	..GG.....AA.C---GCG.....C.CG..G.C.....					Mouse

HoxA2a:1


77925:	C-----AACGGACCCGTGTGCTTCTCTCCGAAAGGTG---GGTTATTTC	tilapia
71408:	T..A.....T..C..A.....G....A	pufferfish
76758:	A-----GC...TATAT.T.....A..A.....A---A...T.AC.	zebrafish_a
91171:	CCT..T..AC.A.A.....C..TC....ATTT..A.T...A	zebrafish_b
114587:	TC.T..C.A.....C.GC..	horn_shark
153841:	.GCAGCC.C...C..T.CT...C..AGC.AC....C.G.C.	Human
147945:	CG..C..T.CC...C..GGC.AC....C---A..C	Mouse
139337:	...	Mouse
77966:	AAAGCAGAAA---GAGCTGCTGTAATCTATCTTCACTCTCTGGT--GCT	tilapia
71449:	CG.G..T.T.AG...T....	pufferfish
76799:	.G.AA.A..T-----AG.G.AA.T...--GG..A.TCT.TA.ATC.---	zebrafish_a
91215:	..TAA-----G.TA.T.T.T.A.AT.TGA..	zebrafish_b
114612:	AC-----T..A.TT.GAAT.AT---TC	horn_shark
153884:	ACTTGGCCCCAG.TCT...GG.--CCCTC.TC..TCTCC.G---...	Human
139340:	T..G.G-----T.TCTT..C.G.A.GC...TC...CACA...--GC	Mouse
78010:	AAATTGAAGACCT--GCAAAGGCCCTTACTCAAAACAACAAATAGGCTTT	tilapia
71472:	.C.ACC.GA...CCAA.TGG....T..CT.TT....	pufferfish
76841:	.....	zebrafish_a
91242:	CC.AAC..A..GC--A-----TTTA...GT..C--T..T..TTT.CA	zebrafish_b
114639:	TT.ACTT...TC-----TTAT..G.ATG..T-----	horn_shark
153930:	GCCCC..GAGT-----G.TG.GGGGGG.GGGGAG.G.G...GG	Human
148039:	GTTG.GGGGG.GG-GGACC..GA...C	Mouse
139384:	..GCCA.G..	Mouse
78058:	-----AAGTCGTTTCATTGTGGCAGATTT-----ATGGTTGTTGCT	tilapia
71507:	-----AC.G.A.TTT.G.TCGGATATGG.C..A...G.	pufferfish
76842:	-----	zebrafish_a
91285:	GTAGGCT.CCT.CG.TGCGCG.TGCC..GCTACTGAAAG..CAA.GCAG.	zebrafish_b
114668:	-----TGTT.AA.CAG.	horn_shark
153970:	GAGAGA.G.AG-----GA.G.AG...GC-----T.....CCTTG	Human
148067:	GAGGGA.G.GG-----GA.A.AG...GC-----C...G.CG.G.	Mouse
78094:	TTGCAGTTATTGTGTGAAGCAA-----TAAAAGGAAGCGAAAA-	tilapia
71541:	..CATA.GG....CT.CGG.GC.-----A..TG.-----	pufferfish
76842:	..TACAA...ACCCA.A...CT-----G.-----	zebrafish_a
91335:	...TTA..C..A..G..C.T....--ACTTAC.GCG.AC...TT..T.T	zebrafish_b
114680:	..TATT..G...CTA..T..TA.T-----G..ATC-----	horn_shark
154008:	.CC.T.CCCC...G..TC..G.GTGGGTTTGA.GG.GA.G.AA.GGG.T	Human
148105:	C.CAT.CCCC...GTCTC..G.GTGGGTTTGG.GG.G..G.AAAT.G.T	Mouse
78134:	-----AAAAAGTT	tilapia
71572:	-----T.....	pufferfish
76869:	-----TG...A..	zebrafish_a
91382:	CT-----GT..	zebrafish_b
114713:	-----G..GCAC.	horn_shark
154058:	CCTGCGCTCTACAATGAGACATATATATTTTtaggaagTGGGGGG..AC.	Human
148155:	CCCgagTCCCACAATGAGACATATATATTTTgaggaggG---GGGGCAC.	Mouse

	78151	78161	78171	
78142:	TGGGTAAAGTTTGGTGATGTAAGATGATTTATT-----			
71580:	...C.....AG.A.....			
76877:	CT.CA.....			
91392:	.T....GTT..G.A..C.....A.G.....-CAGCACAACCT			
114721:	.TCTCC..C..ATT.A...G.G.....			
154108:	.TCCCG..C..GT..A...GG.....TGAGTTGGAACCTGACCT			
148202:	.TCCCT..C..GT..A....G.....TGAGTTGGAACCTGACCT			

tilapia
pufferfish
zebrafish_a
zebrafish_b
horn_shark
Human
Mouse

	78182	
78175:	-----CCCCTAGCC-----	
71613:	-----..TT.....	
76885:	-----TGT..GA.T-----	
91431:	CCTAAACTGTGTTAG...CTT-----	
114754:	-----TG..C...TAGTCAGAAAATGACCTTCTGTGCTCTCCC	
154158:	CCTCC-----TGT...TT-----	
148252:	CCTCT-----TGT...TT-----	

tilapia
pufferfish
zebrafish_a
zebrafish_b
horn_shark
Human
Mouse

	78194	78204	78214	78224
78184:	-GAGGCA-----GAGTTTTGATGTGTGACAGTAATGAAGAGTGATGG			
71622:	..TT.....CG.....			
76894:	-CC.AT.....GA..CGA.A.GCT.....A...AT			
91452:	-.TA.TGCAGGGCAT..A...A..A.T.....A...A.			
114792:	CATCTT.....A.T.....A.			
154172:	-.TCCT.....G.C.T.T.....A.			
148266:	-.TCCT.....G.C.T.T.....A.			

tilapia
pufferfish
zebrafish_a
zebrafish_b
horn_shark
Human
Mouse

	78231	78241	78250	78260	78270
78225:	AG---TGCCTTTGCCGAGGAGG-GCAGCTGGAGCATTCAATTAGTATCCCA				
71663:	G.....				
76931:	.T---...TG..TAAACAC.A.T.GC...CAT.....				
91501:	.T---...A..A.TC.ACTC.....C.TG.....				
114834:	.TGAGC..AC..T.ATG.T.AA.....AT...GAG..C.....				
154213:	.T---C..TC...TC..CTAA.....AC....A.....				
148307:	.C---C..TC...TC..CTAA.....AT....A.....				

tilapia
pufferfish
zebrafish_a
zebrafish_b
horn_shark
Human
Mouse

	78280	78290	78300
78271:	CA-----CCAGCCTGGACTTCACTGCTTCTAAAGTGCAGTGAG--		
71709:	..C-----..C.C.TG.....T.GGG.C.....GC--		
76970:	-----AA.....AG.C.GTAC..TGA...-		
91539:	-----ATCTTCA.TC...C..T.C..ACTCT-----CAGACA		
114878:	A.TGTGGAAAGG.TGTTG.AA..G.T...A.AA-----G.T..G.--		
154251:	-----AA.T.GTGT..TGG.....T.TAA...-		
148345:	-----AA.T.GTGT..TAG.....T.TAA...-		

tilapia
pufferfish
zebrafish_a
zebrafish_b
horn_shark
Human
Mouse

	78317	78327	78337	78347	78355
78309:	-TTTAGTTCACGCTCACGCTGAGCCTTATTTTATCTATAA--AACAAATCT				
71742:	-..G.C....T...T...T..GCTG.GT.A...AA.....C.GC				
76995:	--ACG..C...T...GTTTGC.TCTACAG.G..T.TCT.G....TT.TA				
91575:	CA.C...AT.TT..GG.AT..G.GA.G.G---GAC.C...TT.T..A				
114918:	C...GA.G...TGT.TTT..CAATA....A..A.T.T.--GC..G.--				
154277:	-...GC.C---.GG.T.AA...GT.GGGGGG.G.C.C.GGC.TG...TC				
148371:	-...GC.C---.GG.T.AA...GT.GGGGGA.G.C.C.GGC.GG...T.				

tilapia
pufferfish
zebrafish_a
zebrafish_b
horn_shark
Human
Mouse

	78363	78373	78383	78387	
78356:	GATG--AAGATCTTTACAGAGCGACGATTTTTT-----TTAGGGGGG--				tilapia
71789:	GTT...CG.TG..C-----				pufferfish
77041:	AG.....TG.A.T.TC-----				zebrafish_a
91619:	AG..CCGT.GCTC.ATTCCCA.A.AC.A...A.GCTCCC...AAAC.CA				zebrafish_b
114964:	.GCA--G.CGC.ACAG.C.C-----				horn_shark
154323:	...A--G...GGAGGGGAC-----				Human
148417:	G..G.GGAAGAGAC-----				Mouse

	78400	78410	78420	78426	
78396:	-----TGGTGAACGCTGTATAAGTTTGTT-----CAGTAT				tilapia
71807:	-----T.T..AA...T..G.G.AC-----C				pufferfish
77059:	-----..AT..CCTT...G.CA-----T..A				zebrafish_a
91669:	ATATA.TTGAC.A.T..G.G..A.CA.C-----TA				zebrafish_b
114982:	-----AG..AT..G.A.CAA.G....				horn_shark
154341:	-----G.GGTCTG-CCC.G.C.G..C.CCCAGGAAAGGCAG..CA..				Human
148435:	-----..GG.TTC-CCCGG.C.G..C.CCCAGGAAAGGCAG..CA..				Mouse

	78434	78444	78455	
78427:	AGCTCTA-----GCGGCCATTTTGCTGCAGCG-----TG			tilapia
71830:	...GGC.CCC-----T.....T-----CT			pufferfish
77081:	.AT.....T..T.AA.CAT-----			zebrafish_a
91701:	...C.C.CA-----C.			zebrafish_b
115002:	-----CTGCATTCAG--.....T.....T.GATGGTCTA.A			horn_shark
154382:	CTGCATCCAGGG.....T.....TTGATCTTTTC..			Human
148476:	GC.CTGCATCCAGGG.....T.....TTGATCTTTTC..			Mouse

	78465	78475	78485	78501	
78456:	CTGTGAGCCACTCTCTGGTGGACTGTGATAGCCATAA----CGTTAGATT				tilapia
71862:	G..C.GTGATT..G.A...				pufferfish
77105:	..A.....TTA.....T...AC..				zebrafish_a
91716:	T...A-----AA.A....ATCA...G.				zebrafish_b
115045:	T.T.A-----T.....TT..G.T.C				horn_shark
154432:	..A.A-----TT.ATTC.C				Human
148526:	...A-----TT.AT.C.C				Mouse

	78511	78521	78531	78539	78549	
78502:	TATGAGCAGCAAGGTTATGTAAGTCTGCTGGG--TCCTGCTTTTTTAATCCC					tilapia
71886:	C..A.....G.TC..G..CTG.A.AACT--.G.CAGACA..CT..AAT					pufferfish
77127:	.GAA.C-----GA....C-----					zebrafish_a
91736:	...A.TT..TGGCA.ATCAAT.A..TATAA--.GT..TAA.CCC-----					zebrafish_b
115064:	A.GTGA.T.T..AC.AT.A.T.T..T.TTT--CA..T..A..A-----					horn_shark
154446:	C.GTG-----A..AACC.C...C..ACC...C.ACC.CC..CTGT					Human
148540:	C.ATG-----A..AACC...C..ACC.T.C.ACC..C..CTGT					Mouse

				HoxA2a:2	
	78559	78566	78575	78585	
78550:	GCTACTGTGCCG---CTTAT---TTTC-----CAGGCTCGCCTGAGA				tilapia
71934:	ATCGTG.C....T.....T...T.....				pufferfish
77145:	-----T..A---T-----AT.G...C				zebrafish_a
91778:	-----T.C-----C...				zebrafish_b
115106:	-----T..TA.AAA..C..				horn_shark
102544:					horn_shark
154487:	..G-----T.T-----G.TGG...CCTTTCCG...AA..C.TG..A.				Human
148581:	ATG-----T.T-----G.TGG...CCTTTCTG...AA..C.TG..A.				Mouse

HoxA2a:2

	78595	78606	78616	78626	
78586:	TCGTGGAGAG---CGG-----TGGGGGAGGAGGGGGCTCCCGTCGGCTG				tilapia
71970:	.T.....CGC.....G..A.....T..T.....A				pufferfish
77175:	.TCCCT.C.---T..TTTGTC.T.TA..C....A..T..G..C..C...				zebrafish_a
91797:	.TTC-----T.A-----...T..CA.T...CAA.T..C..A..C				zebrafish_b
115146:	.A..G..GA..T.A				horn_shark
102548:	CG.A...C.....G....G..G....				horn_shark
154532:	...C-----A-----...CA.C..C....A..G..G..C...				Human
148626:	.A.C-----T.A-----...CA.C..C....A...A.G..T...				Mouse

HoxA2a:2

	78636	78646	78656	78666	78676	
78627:	AGAACAGCGTACACTAACACACAGCTGCTGGAGCTGGAGAAGGAGTTCCA					tilapia
72014:	.G.....A.....C.....A.....T.....A					pufferfish
77222:	C.TT.A.....TT...T.A.--.....A..					zebrafish_a
91832:	G.....T..T.....T.....					zebrafish_b
115160:	..G...T....A....G....TT.....A..A..A..T...					horn_shark
154567:	T..T...C.....T..A.....A..A..A..T...					Human
148661:	C.....C.....T.....TT.....A.....A..T...					Mouse

HoxA2a:2

	78686	78696	78706	78716	78726	
78677:	CTTCAACAAGTATCTGTGCCGGCCAGGAGGGTGGAAATAGCGGCCCTAC					tilapia
72064:	C..T.....TC.....T..GT					pufferfish
77266:	...---...GA..C..TA...A..AC.CC.T.....TCA.A..G.					zebrafish_a
91882:	A...C.T.....C..C..T..G.					zebrafish_b
115210:	T..A.....C.....G..T..A..TT.G.					horn_shark
154617:	T.....C..T..A.A..C.A.....G..T..A..G..G.					Human
148711:	T.....C..T..A.A..C.C.....C..C..G..G.					Mouse

HoxA2a:2

	78736	78746	78756	78766	78776	
78727:	TGGACCTGACCGAGAGGCAGGTTAAAGTCTGGTTCCAAAACCGACGCATG					tilapia
72114:	C.A..A..C.....G.....G.....					pufferfish
77313:	.C..G..AG.G..AC.CT...C.....T.....A..A					zebrafish_a
91932:	.A...C..T..AC.A..A..C.....T.....T.....GA.A...					zebrafish_b
115260:	.T..TT...T..A..A..A..G....A.....T.....A...A...					horn_shark
154667:	...TT...T...A..A..G....G....T..G....GA.G...					Human
148761:	...TT.....A..A..G....G....T..G....GA.A...					Mouse

HoxA2a:2

	78786	78796	78806	78816	78826	
78777:	AAGCACAAGCGGCAGACCCAGAGCAAGGAGAACCAACGGGGACGGCAA					tilapia
72164:	A.....G.....T.CT..A..G..					pufferfish
77363:	..A..T..A..T..A..A.A.CT.T..C.T.T..GAAACTA...G					zebrafish_a
91982:	..A....A....A..G..T...A.....T..TC...C..T..A..					zebrafish_b
115310:	AA.A.....T...A..A.....A.....C..T.....					horn_shark
154717:	A.....T.....A.....A..A.C..A..G..					Human
148811:	T..A....A.....T.....A...A.C..A..G..					Mouse

HoxA2a:2

	78836	78853	78863	78873	
78827:	GGGGCTGAGCGCCGAGGAC---GGCATTTCACAGCGAGGAAGAGGACGAGG				tilapia
72214:	A..C.C....A.....G---.G.....C.....				pufferfish
77413:	.---AAA.AT.T...T..GTGT..TGCAA.G....C..G.....C				zebrafish_a
92032:	ACCA.C....CTG....GGCA..GGA.GGG.T..T-----G.A				zebrafish_b
115360:	ATTTAA..ATTTG.....T---A.TGGA..G.CT..A..T..C..A..A				horn_shark
154767:	AT.TAAA...CTT.....TCC.AG.AAGTAGAG.....C.....A..A				Human
148861:	ATTTAAA.A.CTG.....TCG.A..AAGTGGAG..A..C.....A..A				Mouse

HoxA2a:2

	78883	78893	78902	
78874:	CCCCCAGTACGAGCAGAGC-----GG-----GGCCCTG			tilapia
72261:	GT..TT..T.GA.....			pufferfish
77455:	.TT.ATTTGTG.CC..AGT.AT-----CAGATT..T.G.T			zebrafish_a
92073:	AAT.TTTT.T..A..AGTGGCAAACAATGTATCA.....G..T			zebrafish_b
115407:	AGT.A.TC.TT....AG..ATCAACAATGTTACA.....C..T..C			horn_shark
154817:	AGA.G.TC.TT....AGC.CTTAGCGTCTCT-----T			Human
148911:	AGT.A.TC.TT....AGC.CTCAGTGTCTCC---.-----T			Mouse

HoxA2a:2

	78912	78922	78932	78941	
78903:	CTGGAAAGAGATACCTGCTCCTTTCAAACAA--CAC-----ACAG				tilapia
72290:	G.....G..A.....GTCTCACGGT				pufferfish
77492:	G....CGA...GT.GAA..A...T.....CCTGTCATCCATCGC.G.				zebrafish_a
92117:	T.....GGGT.ATC.A....GC.G.--T..CTTAACTTCT..A				zebrafish_b
115451:	T....C..G..AGG..ATA.T.....TC...--TG.ACTGACTCA...				horn_shark
154858:	G..G..AGG..A.A.T.....GC.A.--TG.CCTCTCTCAG...				Human
148952:	G..G..AGGG.A.A.T.....GC.A.--TG.GCTCTCTCA...				Mouse

HoxA2a:2

	78951	78961	78971	78981	
78942:	-CA-GCTC-----CACAAATGGAGAGTCGATGAGCTTTGCTGCTGCGC				tilapia
72332:	-TCG..G.AGCAGCAC.....A.C.T...C...G.....				pufferfish
77542:	A..GC.CTGTAATGAAA..G.CA-----GC.CA.TT..AAA..T.T---				zebrafish_a
92165:	-.GT.A.AGAATGGA.....A.T..T..CCAA..GCAA..TCT...				zebrafish_b
115499:	-.G..G.AGAATTTA.....A..CCAA..T..CC.A.T.T...				horn_shark
154906:	-.G...CCAATGGA.....C..C..CCAA..T..CC.A.TCT...				Human
149000:	-.G...CCAATGGA.....C..C..CCAA.CT..CC.A.T.T...				Mouse

HoxA2a:2

	78991	78999	79009	79019	79029	
78982:	CGCTGAACAGCAA--TGACAAAAATCTGAAACATTTTCCCAACCCGTCAC					tilapia
72381:	-----					pufferfish
77584:	-T..A.CAGAT..ATG..A..GC.....AT.A..TT..GT.A..T..					zebrafish_a
92214:	.TT.AGGT.....C.....					zebrafish_b
115548:	.TT.ACC.....G.....A.....ATC.G.A.....					horn_shark
154955:	.TT.A.C.....G.....AGC...A.....					Human
149049:	.TT.A.C.....G.....T.....AGC...A.....					Mouse

HoxA2a:2

	79039	79049	79059	79069	79079	
79030:	CCACTGTTCCGGGCTGCATGTCAACAATGGGCCCCGGCTCGGCATCTGGC					tilapia
72429:	.T.....A.....A.....G.....					pufferfish
77633:	.A.A..C..T..AAA.GGGAA...T...C..					zebrafish_a
92262:	TAT.....CCA.....C..G.AT.GT.....CT					zebrafish_b
115596:	AAAA...C.....C..AGAA..GT...G....					horn_shark
155003:	CAA...T.....AGAA..GT.G.G....					Human
149097:	TAA...T...					Mouse
143066:	C..T...T.A.T.....A...					Mouse

HoxA2a:2

	79089	79099	79109	79116	79126	
79080:	CCGGACAATGGCGACAGTCCCCGGCCCTGGATGT---TTCTTTACACGA					tilapia
72479:	A.....T.....A.....					pufferfish
92312:	.A.....G.....T.....C....C.....G..					zebrafish_b
115646:	TT.A.....AGA.....T....CCC.....G..					horn_shark
155053:	.TAA.....TGA.....T..G..CCCC.....G..G..					Human
149147:	.TAA.....GA...A.C..G..CCCC.....G..G..					Mouse

HoxA2a:2

	79136	79146	79156	79166	79176	
79127:	TTTTCAACCTTTCTCCTCGGATTCCTGCCTGCAGCTCTCCGATGCAGCCT					tilapia
72526:	...C.....A.....					pufferfish
92356:	C..CA.CGT.....AAAC.....T.A..C.....A.....C.TG.					zebrafish_b
115693:	...A.CGTA..T..A.A..A.....T.A....T..A...G..TA.					horn_shark
155100:	C..AGCGT.....A.A.....T..A.....TT.					Human
149194:	C..CA.TGT.....A.A.....T..A.....CTG.					Mouse

HoxA2a:2

	79186	79196	79206	79216	79226	
79177:	CGCCGAGCTTGTGAGAGTCTCTGGACAGCCCCGTGGACATTTCTACGGAC					tilapia
72576:	.T.....G..A..AT.....T.....					pufferfish
92406:	.T..A..T.....A..G.A.....A.T.GTT.AA.....G					zebrafish_b
115743:	...C..T..AC...G...C.....T....TC...G.T...					horn_shark
155150:	.A..C..T..C...GT..C..C....T....A..T....AG.T...					Human
149244:	...C.....C.T.GC..C.....T..T..A..T..C..AG.T...					Mouse

HoxA2a:2

	79236	79246	79256	79266	79276	
79227:	AGTTTCTATTTTCTCGGAGTCTCTAACTACAATCGACTTGCAGCATCT					tilapia
72626:	..C.....C.....A.....					pufferfish
92456:	GCC..TG...C...T...A.G..T..A.....C...A..CT.					zebrafish_b
115793:	...TG.C...TA...TA...C.....T.....T.					horn_shark
155200:	..C..AG.C...TA.A..CA.A..C..C.....					Human
149294:	..C..TG.C...TA.A..CA.A..C..C.....C.A.....					Mouse

HoxA2a:2
→

79286	79302	
79277:	GAAGTATTAAC	tilapia
28411:	...A...C...A...-TCAATCAAAT	striped_bass
72676:	..G.....A.....C.G	pufferfish
92506:	..G...C.....	zebrafish_b
115843:	C.....GA..AGTCGCTGTGAGCAGAATATGCCT..TT.T....	horn_shark
155250:	...T..C...AA.C.T-----A..G....	Human
149344:	...T..C...GA.C.T-----A..G....	Mouse
79312	79320	
79303:	AACTTTTTTTCCCTTC--TTTCTTTTCGGGACAATAAATATCAGGCTACAA	tilapia
28436:	TCTA.....T.....CT...	striped_bass
72702:	T.AC-----G.T.....G.....AC....G.	pufferfish
115893:	TCG....C..T.....AG..C.....	horn_shark
79360	79370	
79351:	CAACATTAACCCCGATGTTATTTGTATATTCGGCACATTTATTCTGTTGA	tilapia
72736:	TGGT.....-T..C.....ATA..AT.....T.CA..G	pufferfish
79410	79420	
79401:	TATTTGACTTGACGATTAATACAAGGTAAGGATGAGATTAAATCACTGAA	tilapia
72784:	A..A.....G.A.G..G.	pufferfish
79459	79469	
79451:	-GCAGCTTAAACGTGGCTTGTAATTACCATAACAACCTGTTCTCTTGGAA	tilapia
72834:	TATT...C...AACAA.GC.G.T...A.....AC..A....C.....	pufferfish
79509	79519	
79500:	TGGAAATTATGAGTGTTTGTGAATAATTATACAATATTAGGCCTATGGAA	tilapia
72884:	C.....A.....T.CG.....A.....	pufferfish
79559	79569	
79550:	CCTGGTCGTTTTTATTTTTGTA-----TAGCTTCCAATGTCTTGGATAT	tilapia
72934:	A.....A.....AT.....T..AA....	pufferfish
110741:	T.GCC...G	zebrafish_a
149658:	CCACAT...AA.G..T...A..CG...	Mouse
79603	79613	
79594:	TTTTGTTAGAAACAATTAAC-TTGCTACAATCTTCTTTTTTCTGGTGT	tilapia
72978:	C.T..A.....-T.....-AG.....CA.GGT...	pufferfish
110754:	C.C...AT..T..T...CT.TG...C-----C..AC....T.T..TC	zebrafish_a
117006:	T-.....C....	horn_shark
149698:	G.....A.T.CTC.T.....T..GTAG....C..AT.TT.T.	Mouse

	79652	79662	79672	79682	79692	
79643:	TTGAGT	GATT	TATTAT	CCATTT	CCAGAC	TTTTCTTTTTTTCTTTTTTCT
73025:	.....	CC.....	A.AAT..	AAATA.A.		
76154:					G...	A.T..AA..T.
110798:	..T.T.T.	T..	T..A..	TTCT.....		
79169:					..A...	T..C..G.C
80523:		...GTT.....	TTTT.....		TC...	C.G.
155833:				C...	T..GC....	
149748:	C.					
149928:			T.....	T.....	GG	

tilapia
 pufferfish
 pufferfish
 zebrafish_a
 zebrafish_a
 zebrafish_b
 Human
 Mouse
 Mouse

	79702	79712	79722	79732	79742	
79693:	TTTTTTGCTT	GAATTAT	TTCATGT	AGAAAAA	TACACAAA	ATAAATAATT
73067:		..C....	C.....	C-----	G...T..	G.-
76173:	.G.....	T..				
79184:	..A....	TCA.GC..	G..GC....	A.....		
80561:	.....					
155854:	.C..C.C..					
149953:	A.....					

tilapia
 pufferfish
 pufferfish
 zebrafish_a
 zebrafish_b
 Human
 Mouse

	79752	79762	79772	79781	79791	
79743:	TTTAAAAAGT	AGGACAT	GGCGAGAT	AGAGA-	CGTTAT	GCAAATTTAACAA
73097:	-----	.G...	-----	A.....	G.CG.....	CT...

tilapia
 pufferfish

	79801	79811	79821	79831	79841	
79792:	CAGGTTGGCA	ATGAATATA	AAATAGGCT	ACACTTC	GAGGTGTC	GTTGAAGG
73131:	.....	.....T.T.	TA..AT..	-----	G....G.AC..	TGAT

tilapia
 pufferfish

	79851	79864	79882		
79842:	CACACACGGT	GTAATTTTT	-----	TTTTCCTAGGAC	--CAAATTTCCA
73177:	G.....	G.T.TC.C....	ACAATTC....	AA.T.C.TTGT....	C.TA.

tilapia
 pufferfish

	79891	79901	79911	79921	79931	
79883:	CATC-CACA	ATTATGTTT	GAAAAGTTT	GCCGAACC	ATAAAAAATTA	AATC
73227:	TG..GT...	TCG...A.A.	AGG.T.CA.	ATAA.---	G....T.C.A.G..	A

tilapia
 pufferfish

	79941	79951	79961	79971	79981	
79932:	AGTTTCCTG	AAATCTTAA	AACTTTGG	GAGGTTAC	ACTTTTTTTTTTTTTT	
73274:	-----	A.G...	GC.A.CAT...	T.TG.AAGCC....	-----	
80873:			..GT.....	C.C..		

tilapia
 pufferfish
 zebrafish_b

	79991	80001	80011	80021	80031	
79982:	TTAAGTCAA	ATGATGTATA	ATTTTGCACAA	ACTGAAAAA	AAACACTCAG	
73311:	---.A.G...	A....G.C.	-----	GA.....T.CC....	-----	
80894:	.GG...AG..	ATG.....	T.C.			

tilapia
 pufferfish
 zebrafish_b

	80041	80051	80061	80071	80081	
80032:	GCAAAATTG	CAGTATTTT	CTTTAAATC	TTTGGATA	AATTCGCATTT	TACAC
73343:	-----	..CTC.....	T.....	-----	CA.C.....	C.-----

tilapia
 pufferfish

	80091	80101	80110	80120	80130	
80082:	ATAAACATA	AAAAAGAT	GGTTTTAC	ACTG-TTT	GATTAAGC	ACCAACACAG
73374:	-----	TACCTT	.C.A.....	A.A....--	A.ATG.G..	C.

tilapia
 pufferfish

	80140	80150	80160	80170	80180	
80131:	ATTATTCTATTTT	CACCTTCAA	ACTATTTT	GTAGAGAGAGAG	AGTGGGG	tilapia
29071:					A.A.A	striped_bass
73415:	-----A....T...A..T....	CC...TA.A..CAA	TAT			pufferfish
111109:					A.A.A	zebrafish_a
163529:			AC...A.....A	AA..A.		Human
143847:					A.A.A	Mouse

	80190	80200	80210	80220	80230	
80181:	GAGGGAAAAA	ACAGCAAAT	ATGGCAACAC	GAATCTAGGC	ATGACAGAGCT	tilapia
29088:	...A..G.G.					striped_bass
73457:	.T.CAC.TG.	-----			G...	pufferfish
111126:	...A....G.					zebrafish_a
163549:	...A.....					Human
143864:	...A..G.G.					Mouse

	80240	80250	80260	80270	80280	
80231:	CTTAACATTGT	ATGCATGTT	GCAGGCAAAT	ACGCGAGCC	ATGTTTGCCTT	tilapia
73474:	G.....		C.....			pufferfish
117361:					...	horn_shark

	80290	80300	80309	80319	80329	
80281:	CAGGAGCTC	ATAAATCACTC	-CGTGGCATGAAT	GAGACGGAC	ATTAAGGA	tilapia
73524:	.....				A..	pufferfish
117364:	.CCA.A.....	AATC.C.TTT	AT.T..C..	ATG		horn_shark
156892:	AA.G.T.TCT	AT.T..C..	A..			Human
151004:	AA.G.T.TCT	AT.T..C..	A..			Mouse

	80339	80349	80359	80369	80378	
80330:	GACCAATTGTGG	CGTAATGTGC	ACAAATAAA	ACCCCACTTACA	-TTTTCA	tilapia
73573:	.....					pufferfish
117414:	..T....C.CA..A---	A..T..CA...	AA.AT....G-	A..TG		horn_shark
156937:	..T....CA.GAAC.CA.....	AT..T....GT.A..TG				Human
151050:	..T....CA.GAAC.CA.....	AT..T....G-.A..TG				Mouse

	80383	80397	80407	80417	
80379:	T-----ATGGG	ACTCCCC-----	AATTCC	TGGGCTAAAAGGGGCTGATT	tilapia
73622:	-----G-----	T.C.TC.T.T....G....C..G.			pufferfish
117459:	CTTGGACC...GAA...	---TGTC.GCTTGAAA..TGT..-----			horn_shark
156987:	C-----C...GA....GTCCGA..GCAT.AA.T..G.....				Human
151099:	C-----C...GA....GTCCGA..GCAT.AA.T..G.....				Mouse

	80427	80437	80447	80457	80467	
80418:	CTCTGCATGCGTTT	GGTAATAATT	CATTTTATAGCTT	GTTTAAACACGG		tilapia
73661:	G.....					pufferfish
117497:	-----GA..CG.....C.CT.T..C..					horn_shark
157022:	-----A..C.....T..CT.....					Human
151134:	-----A..C.....T..CT.....					Mouse

	80477	80487	80497	80507	80517	
80468:	CTCTGGCTCGGCG	ACAGCAGCAG	CGGTAGCAGCCT	GTCTCAGGTTATGAGT		tilapia
73711:	T..T....T.T--	TA.....T.....T..T..G-AC.C				pufferfish
148780:	G.....G....CG..G..					Mouse

80518: TGCACACTTTCCCTCGTGTGTTAAAAGTAGACTAAACTCAAAACAGACTA tilapia
 73758: ..A.AT.C..T...-C.....T.----C....C.....G..... pufferfish

80568: CTCGTAGACTAAATGCGATTTCATCAGATAAATAATTACCAAT---AAGAG tilapia
 73803: A-----..T.ATC...T...TT.G.-----..G...GGGA..T.. pufferfish

80615: CCTGCTTGCTGCATTGAACAGGGTCGGCCATCATGGCATACTTTATTAAG tilapia
 73839: A.A.T.-----C.T..T.....-----C...C..C... pufferfish

80665: AAAGTATCTGTATTTTGGGGGATTTTACAATCACTTTTGCACCTTGTTTT tilapia
 73869: .-----..TT.TGCA.... pufferfish

80715: AAAGGGCTTATAAAGTGTCTTGCGGTGCTGTATTAC--ACCTGATTTTCA tilapia
 73884: .G.T.AT.....CA.TAT...A.-----A..AGGG.T...GG...A pufferfish

80763: TTTGGGAA--ATGAGCTCAACTAAAAAAAAGTTA-TAGTCCACTTAAAC tilapia
 73928: CG....G.TT....ATATT.....TTG.G.CG.C.G..GGGAA.C.GT pufferfish

80810: AGGT--TTATCTGCAACATGCTTATAAAGAAAGAAGGAAAGAAGGGAAAA tilapia
 73978: .A..ACC.T.T.....GT..GC.TC.T..CGT.TTCA.CTA.CA.CC... pufferfish

80858: GCCGCATAGGCCTGCCTGCCTGCACGGATCGATCCAGAACTCATCTACA tilapia
 74028: A.AA.CACC.GT...AACA..TG.....T.AT.T.....C... pufferfish

80908: CGCGCGACA-----TTCAGAGGCTCCAACG-----TTTATCGAATAAT tilapia
 74078: .TT..A.T.AACAATC....-A..TAGG.AGAGTGT...C.....G.. pufferfish

80946: CTGGAAGCCATAAGCAGCTCATTGACTGGCTGGACATTAGTCT-TACTGA tilapia
 74127:C...C.....A...A..G...AC..A.....G pufferfish

80995: GCAAGTGGTCTGTGTTTGAGTTTAAGGAGGAGGAGAGGGGATGTATG tilapia
 74177: TTC.C.C.A..C..CA.-----G..AC....A..G----- pufferfish

81045: GGTAAGGCGGGGGCAGATCTTGCACTCCTGCACTCTGACTAACCACAGG tilapia
 74210:-T..T.T.---C.....-C..C..... pufferfish

81095: GCCAGTTTAACCAAATCATTTCCAAGACAGCGCGCTTTTCTGCGCACATG tilapia
 74252: ..G...C.....G.T...A.....C.....G.... pufferfish

81154	81164	81174	81184	81194	
81145:	CGTTCACACACAAAGAGCCAAGAAAGCTCCGAGGCCTGGCGAAGTTTCCA				tilapia
74302:	T....C.....TTTA...C.GT.....				pufferfish
81204	81214	81224	81234	81244	
81195:	TAATCAGGCAAGGCAAGATCCACTGCGCCCACTCACTACTTTTTCACAGG				tilapia
74347:	C.TG....G....G---TG.T...A.....TGGG..GCA--G....				pufferfish
165885:	C.TTC....CGG.G....				Human
81254	81263	81273	81283	81293	
81245:	CAGCTGGGAAGACAGA-GGAAAGGGAGGGGATGATGGTTAGAGGGTATT				tilapia
74392:	ACG.....CT.T.G.T.G...T.GG..G.AGCT.GTA.C...				pufferfish
165916:	.CAGGA.....				Human
81303	81313	81323		81326	
81294:	GACCCTACTCCCCCTCCCTCCAAGTGGAG-----GGA				tilapia
74442:	C-----G.G..TT..AAAA.AAAAAAAAAAAAACTGGT..G				pufferfish
150983:	...C.....TT.....T..G...				Mouse
81336	81346	81356	81366	81376	
81327:	AGTTTGACCTCTTATCTTTAAACTCTTTGAAGTATCATCGTTATGGCG				tilapia
74486:	-----T..T....C.-----A.....-----				pufferfish
81386	81396	81406	81416	81426	
81377:	ATTATCGGCATGCATTTCTATTTTCAATTTGCCATATTAGTGGTAGAAGCAT				tilapia
74511:	-----G-----				pufferfish
81436	81446	81456	81466	81476	
81427:	CCACATCATTTACTTGTGTTAAAATTACAAAATCAGACTACATTAAAAT				tilapia
74519:	-----TT.....				pufferfish
81486	81496	81506	81516	81526	
81477:	TCTTAAGTAAACAACCTCAGTGAATGAACACCTCCAAAAAAGTAAC				tilapia
74534:	CTC.C.T..A.G-----T.T..G..GG				pufferfish
81536	81546	81556	81566	81576	
81527:	GTGTGGTATAGCTGCATAACATCTCAGATTATTGCACGATCCTTATTATT				tilapia
74560:	.CA.AA..C.CT.AA..-TG.T.GG..A.....				pufferfish
81586	81596	81606	81616	81626	
81577:	AACAACGAGTAAGCATCATCTGAATGATGTGCTTGTCCACGTGGGGCGCC				tilapia
74594:	..TG.GAG..G-----TG...G..CAG..A.T.....				pufferfish
81636	81646	81656	81666	81676	
81627:	TTTACACACTGTTGTATTATTTAATTAAGTGAGGCGTAAACAGTGGGC				tilapia
74625:	-----				pufferfish
81686	81696	81706	81716	81726	
81677:	TCCAGTAGTCCCTTCTGACATGTAGTGGAGTCAAAGCAGCGCAAAGAATT				tilapia
74632:	-----C.A.....A.TA.A.....G.....AT..C				pufferfish

81727:	GCAAATAATTGATACAGTGACAAAAACACCAGCTGTGTTTGATCCATTAC	tilapia
74662:	CT..GG...A.-----,AT..CA..AT..TT.----	pufferfish
81777:	CACCGCTGCGTAAAGTGTTCCTTGAATG----CATAGCGATAAAATATC	tilapia
74690:	----AT...A...-----..A....ATTTA..T..C...-----..G	pufferfish
81823:	TCCAAGAATACGATCATATATTTTCTATAGACGTTAAAAACATTTTCGAGA	tilapia
74723:	..GTT.T..CA....G.-C...C.GA...CC.-----	pufferfish
81873:	TTTAGAGTGTATAACCACATGCGACCTTTGGGGCGCTCATCCCTCCGTG	tilapia
74754:	..AC.GC..C.A.G.T....AT.G..AG.....A.C.G...T...A.C	pufferfish
81923:	TGAGTCTCTCTCACTCGCTCCCTCCCTCCCTTCTTCCCGCTTCAT-TCCT	tilapia
74804:	...T.TC.C..TC...-.....C.CCT..C..C.C.C.T.C	pufferfish
81972:	TTTGCTTCCTCAGTGAGAGGTTGGGCA-----TCTGCTGCC--GCTGCCG	tilapia
74853:	...C..C.....CC.....C...T.GCGCAC.....CT.TT.AC....	pufferfish
82015:	CCAGTCTCCCACGCACAAGCTCTGCCCT-----TCTCAACGCCGCT	tilapia
74903:	.AGC.....TT....C.....CAGTTCTC.TC..G..TA...	pufferfish
82057:	TTTCGTGGGCATTAATTTCCGCAACAGCTTTATTTGATGAACTTAACAGG	tilapia
74953:	..C.A.AAC.....T...G.....	pufferfish
82107:	ATAATCAGCCACACTTGCACCTTGGGCTATGTGGATGCATTAGCTCCAC	tilapia
75003:	G.G..C....CC....A.....GC.....C.TG.	pufferfish
82157:	GACTGGCCTCGCGTTATGAGATCATTTGATCACTATACATGCATAATGAA	tilapia
75053:	T..GA..T.G..A....C.....C.....G.....	pufferfish
82207:	TACATGTGGGAGTGAAATCAGGGTGGATAGCAGACCCTATGACCGGAGCA	tilapia
75103:	..T.....C..T...C.-.A..A...GA...T.T...C.....--TT	pufferfish
163019:	...G...G..GGG.G..CAG.....	Mouse
82257:	GAGGGGGGAAAGAAATTAATACCACATCATCTTAATGTTCAATGTGTTGT	tilapia
75148:	.G.A...G..A...G.....T.CAG..A...AA...G..CCC.AG	pufferfish
163045:	ATG.....G.	Mouse

82307:	CTTGTCTGCTT	CATCACCTGT	GACCTCCCGG	CAAAGCGAGC	AGTCATATAC	tilapia
75198:	G	-----	.....	T..T	-----T.AA.A..T	pufferfish
82357:	GTCTAATGCG	GACCTTGATG	GGGAAACAAAG	TTGTGCAAAAT	AAAAAGGCG	tilapia
75236:	TCA.CG	...-...A	ATG.A.A.G	...-----TT	..C....G..T..T	pufferfish
82407:	ATCT	-----	GTGACGGGAG	AGAAGTTTTC		tilapia
75278:	..T	TGACTATGCTGCAACTCAATTCTTTCT	..T.T	...A.C..AC..CG		pufferfish
164057:				..C.		Mouse
82431:	TGTCTTTTGT	CTTCTCCTTC	-----	ACTCTGTGACAATA	TTTCTC---TC	tilapia
75328:	C	C.C	...TG.TAC	AGGAGA.GG	GC.GAGCA	pufferfish
164061:	..C	..C.CC	...T....CT	-----C..A	AGA.TC.C.C..T.-----	Mouse
82472:	AATGTTACGC	-----	GTGAAACAT	TTTCGCAAGGG	AATGTGACAT	tilapia
75378:	C-	TG..AGTTCAAAGC	C	TT.C	G....G	pufferfish
164102:	C	..T.A.				Mouse
82512:	TAATAGCCCAC	AGATAGCCC	GTGGCAGTG	ACACGCACCC	ACCCATCCATC	tilapia
75427:	.G..G	T-T.C	...TCA...GA..G	...A.G.A.T	TG.A.T..T	pufferfish
82562:	CATCCATCCAT	CCATCCAAC	TAGAAGATAAC	GACACCGTTA	--TACACAT	tilapia
75476:	...	-----	...C....CCGTA	AA...TT	..T.T..	pufferfish
82610:	GAAATTGCAACT	GTTATGTGCAC	GTGTCAAC	CACACACAC	CACACACACA	tilapia
75510:	..C	..CA..G	C	-----C	GA.GT..G.A.T..GG...	pufferfish
82660:	CACACACAC	CACACACAC	-----	ACACACACTT	ATTCTCGTCTCTGTT	tilapia
75554:	TC..TC	CA....A	...TGTTGA	G.G.A	...GTA....AC.C.	pufferfish
82704:	CCAAAAAT	-ACCTACCTGAG	GTGAGAGTGCT	AGGTCGTCCT	CATGGCGAG	tilapia
75604:	T	..GG.A	C	GC	AT..TGC.CA...	pufferfish
82753:	GGTGCAGAGGG	GACAAACGTT	AATCTCTCTCT	GTGGTCGTGGA	AGAGCGCA	tilapia
75654:	.C	..-----	-----	CA.G	T...	pufferfish
153624:				G.C	...G.C....	Mouse
82803:	CAGTGGAGCT	TAGACGAAA	--CAGTGTTAA	----CAGTGGCCCC	---GCT	tilapia
75677:	.CTC	..G.G	...C	-----GC	...GC....C..A.T.T.-CT...	pufferfish
153642:	A..CC	G..GCGCG	AG..GG	C.CG	CTCC.TT...T...AGT...	Mouse

	82853	82863	82873	82883	82893	
82844:	CTTCATGCG	ACCCCGAAGCT	GTCCACCGCT	GTCTGCCTCG	CAGCTCATTG	tilapia
75716:	.GC.G.	G.	CTG.....C.	C.A...C.	.....	pufferfish
153692:	.CAAG.CA.CT.	.G.G...G.	-----	CTAC.GC...	G..C.G--	Mouse

	82903	82913	82922	82932	82942	
82894:	TTTGCTCGG	CCAATACATTAGT	GGCGAC-GCGCGT	CACCTTGATCG	GACGA	tilapia
75766:	CA.	A.	T.-	.....	.....	pufferfish
79952:				...A..G.	G...A.	zebrafish_a
119947:				A.....	G..A..	horn_shark
159802:			T.	A..CG.	CG..	Human
153736:	GC...CT.	-----G.G	GC.	AC.	CT..G..	Mouse

	82952	82961	82968	82978	82988	
82943:	GTGCTTGGA	ATTTAAAT-AGCC	---CCTCAAACACCAAT	CTGTCACCGG	C	tilapia
75815:	.C..C.	.....	---A.....	C....A...		pufferfish
79970:	.A.G.C..C.	GC..A...	TGGT..TT...	GA...C.....	GT.CA	zebrafish_a
119966:	.C.T...T.	.....	---A..A....	GTG...GA....	-----	horn_shark
159830:	.C..CG..G.	.....	---A..A....	GGTG...CA....	T.CG	Human
153776:	.C..CG..G.	.....	---A..G....	GGTG...CA....	G.C.	Mouse

	82998	83004	83008	83020	
82989:	TAAAGGGATAAG	----GACAAG	-----TACCTCA	-----CTGGCTG	tilapia
75861:	.T.GT.	G.GC.	-----GA.	.....	pufferfish
80020:	AGGCCACT	AT...	ATGAGAC.G.A..	ACTGATCA.....	zebrafish_a
120006:	---CATGC..	ACTT-CG..G.	-----G.A.C.	CGC---GAT...AC.	horn_shark
159875:	G..GCC.GC..	ACTTTTG..G.	-----AGG...	GC---CAT.....	Human
153821:	GC.GCC.G..	ACTTTTCG..G.	-----CGG...	GC---CAT.....	Mouse

	83030	83038	83048	83063	
83021:	ACCCGACCC	ACGTGAC--AGCACCCGTT	CATTGATATC	-----GGCCCCG	tilapia
75893:	...T..GT.	C..T.	.....	.....G.	pufferfish
80066:	...A.-	T.TCA.T.G.	C....	ACTAGC....	zebrafish_a
120041:	.ATTT.-GT.	G.GACA.CA.T..	AT.....	-----	horn_shark
159915:	..A.C--T.	C-----	C.T.C.C..GC.TCC.	-----C...T	Human
153861:	GTAGA.--T.	T.--CT.C..TCGA	----.CCC.	-----C...T.	Mouse

	83073	83080	83089	
83064:	TGCGACCCCC	-----TCCCTTCTCTGAT	-AAG	tilapia
75936:	C...CAT.AATTGC	-----G.CT.	A.T.	pufferfish
80113:	AA.AC.T..AATCC	-----	..C.	zebrafish_a
120079:	-----	-----A..T...T---	TCA	horn_shark
159953:	CC..C....CTCTTGCGCACTGTACATT	CATA..AT..T...TC.-	CC.	Human
153898:	CC..C....G.CTCTTGCGCACTGTACATT	CATA..AT..T...TC.-	CT.	Mouse

	83099	83104	83114	83122	83132	
83090:	ACCTAGTATAGGTA	-----AAGATTGGCACGGTC	--ACTCGGGGTAAGAG			tilapia
75964:	...G...T.C..A.	-----G.CG...GG.	-----AC.	.....		pufferfish
80130:	..GA.TG.A.G.GGCAG	..GG..C.T...CTCA..C.A...	G.AT.			zebrafish_a
120090:	G..CCA.TG...A.GTGGGC	AG.....G.--CA..CA...	TG.T.			horn_shark
160002:	G..CCA.GG...A.GTGAG..	AG.....A.....G.C.	-----			Human
153947:	GT.CTA.GG...A.GTGAG..	AG.....C.A.	-----			Mouse

83142 83154 83164 83174

83133: GGGAGAAAGGAA-----GACATCAGGGGGTTGTCTGTGCAGAGGACG tilapia
 76006:G..AT-----A.G.C...A...GT...AAG..C...G. pufferfish
 80179: .T.C..CGTT..TCAGTTCC.GGCC..AA.TTC...A...TG.CAAC.A zebrafish_a
 120138: .AC..TC.-----..T.AT.-T.CTGT horn_shark
 160044: -----TC...GACCA. Human
 153989: -----TC...GATC.A Mouse

HoxA1a:1

83184 83202 83212 83222

83175: GTCCCTCGCTCCGGTTAGA--AAAAATGCTACAATGAGCAGTTTCTTAGA tilapia
 76047: C.....GC..CCA.T.CAG..C.....C.....C..... pufferfish
 80229: CGAG..GAGA.--.CCCA.--G..G...AC.....CA..... zebrafish_a
 120159: T.A..C.AG.--.AC...TGG.C....A.GG...A.TCC..TC... horn_shark
 160058: ...A...AG.--.AC...TGG.C....A.G...A.TCC...C.G.. Human
 154003: A..A...AG.--.AC...TGG.C....A.G...A.TCC..TC.G.. Mouse

HoxA1a:1

83229 83239 83257

83223: CTAC---ACGGTGATGAGCGGGGAAGGT-----GGCTCATGCA tilapia
 76097: T....-T.T.....T.....C-----A.T..G...T pufferfish
 80275: T.TTTCGT.CA.A.GTG.T..T.G..A.GGAGGTAGCGGG...G...T zebrafish_a
 120206: T..T---T.CA.C..T.A...A...AC-----GA.C...T horn_shark
 160105: A....-C.CA.AC.T..A.T.GC.AC-----TCG..GA.C...T Human
 154050: A....-C.CA.CC.TG..A.T.GC.AC-----TCT..GA.C...T Mouse

HoxA1a:1

83267 83277 83287 83297 83304

83258: CTGTCAGGGCTTTTCACTCGGACCACGGGATTACAACCTTTCCA---GTCCG tilapia
 76132: .G.....A..G..C.....AC.....C.....C..... pufferfish
 80325: .A.....G..C...GGT..T....AC..T...A....ATC... zebrafish_a
 120241: ..TC...AAG..AC..TG.A..T..A..A.....AT...---T horn_shark
 160143: .A.C.C.A..C.AC.C.....TA.....--- Human
 154088: .G.CGC.A...AC.C...T....T.....---A..C Mouse

HoxA1a:1

83314 83324 83334 83344 83354

83305: TGCGGGGCCACTGTTAACAACCTGCGGGGTGGATGACCATTTCATGGTGAG tilapia
 76179: ...C..TGT.A..C.....AC.....GA.....C... pufferfish
 80375: ..T.CT.TT.GGT.A..T.G....A.T.GA.....A.GG.....TCC.A zebrafish_a
 120288: ..T.CC.TT.G.AA...T....AAC.CT.....GC.AT..C.... horn_shark
 160190: ...C..T..GC.CC...GT....C.GC..C...GC...C.A...G. Human
 154135: ...C..T..G..CC...G.....C.GC..C...GC...C.A...G. Mouse

HoxA1a:1

83366 83367 83377

83355: CAGA-----GCTTCTCC-----TGACTGCGTCT tilapia
 76229: ...G-----TG...A..C pufferfish
 80425: T.T-----T.G..A.AAGATGTAAT.A...CTCAGC zebrafish_a
 120338: ...AGTGTCCAAATAGGTGCTC..C.....C.TCATCA.C horn_shark
 160240: ...GGGGGTGCAGATCGGT---T.GC.C.A-----CC..CA.CA.C Human
 154185: ...GGGGGTGCAGATCAGC---T.GC.C.A-----CC..CA.CA.C Mouse

HoxA1a:1

83389 83399 83409

83378:	CTCACCA-----GCCGGGGTCGTACCAGTCTAATGCC	tilapia
76252:	A.....G.....T	pufferfish
80457:	.A..A.....G.C..C.....C---C..	zebrafish_a
120379:	A.....AGTA..T.TA.AC..C..	horn_shark
160278:	AC.....CCATCGCCACCCCA.....CTA.C.....A.---T..	Human
154223:	AC.....CCACCATCACCACCCCA.A...CTA.T.....A.---T.T	Mouse

HoxA1a:1

83416 83426 83436 83446 83456

83410:	AGCTCT---CTAAGTCTCCCCTATGGGGGCCACCCGGCCTGCAGCTCTAA	tilapia
76275:	GTGAGCTCA..GG.C..G.T..C.....T.....A.G	pufferfish
80486:	G.GA.---T.GTCAA.TA...CA.C.....TC.A.G	zebrafish_a
120405:	.A.AAC---.GG.CA..T...CA.T.....CAA...TG.GG.AGG	horn_shark
160322:	G.GAAC---.GG.GG.GT...CT---.T.AAGT..TG.TC.A.G	Human
154270:	G.AAAC---.TG.GA.TT.T..T---.T..AGT..TG.TC.A.G	Mouse

HoxA1a:1

83466 83476 83486 83493 83503

83457:	CTATGGACCCCAAAGTTTCTGCGCTACATATA---ACCACCATGCCCTCG	tilapia
76325:	C.....A.....C.---TT.CC....TA	pufferfish
80521:	T.....A.T.....T...A..GG..C.---T..T.....AA	zebrafish_a
120452:	...CCC.G.A..G..C..TAA.A.AGGC..C.GTC.T..T.CT.AT.GA	horn_shark
160366:	CT.A..G.AC...A.T..G.C.T..C.---G..C.T.C..GT.AA	Human
154314:	CG.G..G.AC...A.T..GC.T..G---G..C.T..GAT.AA	Mouse

HoxA1a:1

83513 83523 83533 83543 83553

83504:	CCCAGGAAGTAGACACCACAGCTGCGTTCCCTCAGTGCGGCCCACTGATG	tilapia
76372:	A.....GC.GG...C.G.....A.....G.....	pufferfish
80568:	AT....C..G..AT.GT.T.TGAGC..T..C.....T....GT.AG.T	zebrafish_a
120502:	AT..A..GACG..TGG..AC.GA.G..A..C.....T.CT..TGCTG.C	horn_shark
160413:	AT.....C....GTA.GT.G..G..A..C.....CT..CGCTG.T	Human
154361:	AT.....C....GTA.GT.G..G..A..C.C.....CT..CGCTG.T	Mouse

HoxA1a:1

83563 83573 83587 83597

83554:	TACTCTGGTAACATTTCTCCTCCATGGT-----TTCTCAGCATCGCCA	tilapia
76422:	G..C..T....T....TG.T.-----G.....C..T..	pufferfish
80618:	A..T....T...A.TG.T..GCAGACCG...T....T..	zebrafish_a
120552:	...C....A..T...G....AG.T.-----AGC.CT...A...	horn_shark
160463:	A..TC.C..A..TC.....CCAGCA.CAC..C..C.A...	Human
154411:	A..C.C..GA.TC.....CCAGCA.CAC..C..C.A...	Mouse

HoxA1a:1

83607 83618 83628 83638

83598:	TGGTTACAGT	GCCGC-----	CCCCCTGGGTCAGCTGCAGTATAGCC	tilapia
76466:	G..G...G.CA..A.	-----G.....		pufferfish
80668:	AG..GAAACGTTCA..T..AT..C...T.C....CG..T			zebrafish_a
120593:	CA...TG.C.GGA-----	TGG.A..ATCAGGC..A..CC..		horn_shark
160513:	G....TGC..GG.G-----	.G.GG...CTC..CT..A..C.TT.		Human
154461:	G....TGC..GG.G-----	.A.AG...CTC..CC....C.TT.		Mouse

HoxA1a:1

83648 83662 83672 83682

83639:	ACACTGCCTACAGCGG-----	CGGGCACGAGCAAGCGCCCCCTTATCCA	tilapia
76507:	..T.....TG...C-----	T....T..A--CAAC.AAG.CCT.T..	pufferfish
80718:	CAG.CA.A..TG.TAATAGTTCG.AT..G.CA--.A.CTTA.G..TGTGG		zebrafish_a
120631:	.TCACC.T...G.GCA-----	A.AA..GC---G.TTTAG..C.CG.TG	horn_shark
160554:	..CACT.A..TG.ACA-----	G.A...C---...CTGG..C.GG.T.	Human
154502:	..CACT.A..TG.ACA-----	A.A...GC---.CTCTGG..C.GG..	Mouse

HoxA1a:1

83690 83700 83710 83720 83730

83683:	GGG--TGTTCAAACCCGCTGT	CACCTCTGCATGCAGCTC	ATCTGGAGGCT	tilapia
76549:	C..GA..C.....	G..A..C.....G..C....A...		pufferfish
80766:	C..GC..C.....T.....T..C.....	TGC.....AT..T...		zebrafish_a
120673:	CA---G...GTC..T.T.....CG.T...	GCAG...C.A..A..C		horn_shark
160596:	C---.A.AAT...T.CT....C...C..CAGC..C.AA..A..C			Human
154544:	C---.A.AAT...T.CT.A..C....C..C..CAGC..C.AA..A..C			Mouse

HoxA1a:1

83740 83750 83760 83770 83780

83731:	TGCTGTTACCTCTGTCTGAGGGCGCATCGTCAGCACAGACTTTTGACTG		tilapia
76599:	C.....	AA.....A..T.....C..T..	pufferfish
80816:	..T.....A..A..T...TGC.CA.G.G.....A.....		zebrafish_a
120720:	C..C..GTCTG....AC.C.TC.CC.....C.....		horn_shark
160643:	..TC.C..C..CGCA..G..ACAT.T..TC...G.....		Human
154591:	..TC...C...GCT..A...ACGT.T..TC...G.....C.....		Mouse

HoxA1a:1

83790 83800 83810 83820 83829

83781:	GATGAAAGTTAAGAGGAATCCACCAAAAAACAG	GTTGGTGCCA-AGTATAG	tilapia
76649:	G..C.....	A....TG-----	pufferfish
80866:	G....AC.C..C..G.....	GA...A.T-----	zebrafish_a
120770:	G.....T.....	AAT.T.AG---.T.TC	horn_shark
160693:	C..A..A..C..T..C.....	CA..C.TGCT.GT.G.	Human
154641:	A..A..C..T..C.....	AA..C.TGCC.GC.GA	Mouse

83846

83830:	TGGGT-----GAAAG-----TGCGGGT-----	tilapia
76694:	..TC-----GT.AATGTG..G.T..-----	pufferfish
80908:	-----A..TT-----	zebrafish_a
120817:	.AT..-----C.TTACTTTC.A.A...AATTGTAAG-	horn_shark
160743:	...A.GCTCCTTGATTATTCTG...G.AGCTGG.AT.CT.AATTTCCAAG	Human
154691:	CA.AC-----A..T.CTGTTTCGATTTT.-----	Mouse

	83854	83862	
83847:	-----GTGAGGGGC-----GATCACG		tilapia
76717:	-----CCA-----AGC.TT-		pufferfish
80914:	-----T.ACAA.T-----T-----		zebrafish_a
120849:	-----AAATA-----CTA		horn_shark
160793:	GAAATTAATAATGATCTTTTTTTT.A.AA-----TT.TGTA		Human
154714:	-----AA-----TGGCACACCTAGTT..CTA		Mouse

	83872	83882	83887	83897	
83863:	ACACAAAAATGCTGTCTTATA-----AATGATCCAAAATC				tilapia
76732:	-----C....C.A..TTCA				pufferfish
80925:	-----T..TTTTTC..				zebrafish_a
120865:	G...C.G..GGG.A-----G...CAGC...G.				horn_shark
160831:	T..G.CT.G..T...AG.GC.TGGAGAG-----GG..CC.AG.GG.G				Human
154742:	GG.A..TG.ATGAT.T...A.AGATTGGTTCTTGTTT...TCTA.TGTCA				Mouse

	83907	83917	83926	83936	
83898:	TTTAAACTGAGAAGTTAAAAAAATAAAA-----TAAAATAAACAA				tilapia
76746:	G.----G.A...G.GTT...T-----				pufferfish
80939:	CCG.T.---C.G.A.-.C..GTCCTG.C-----				zebrafish_a
120896:	G.G...GACT.G...A...TC.TT.TCTGTTGCATGT.GTT.A.GCTG				horn_shark
160873:	..GGGG.AA.....CTC.GGG..TGGT-----GTGT.TTC.AGG.TT				Human
154792:	.C..G.G.-T.T...G.GTGGTG..GGG-----GCCCAGGTGT				Mouse

	83951	83961	83971	
83937:	CACGA-----CACACCAATATATGAACTTAACTTTAATTT-AGTACTTT-			tilapia
76771:	-----T...CAC.TC..GGTC...-GACG....-			pufferfish
80963:	-----A..T.GC-			zebrafish_a
120946:	GT.TGATGGC.T...TT.CCTCC..A..GT...TTC...-.GA.C.-			horn_shark
160916:	TTAT.-----TTTGGA.ATA.G.AG..TG.GGGGG.G-GT..T.G.G			Human
154830:	GCA..-----GG..AA.GCG.T.C.CAGGGG..GAGG...A.A.GG.C.-			Mouse

	83983	83994	
83980:	-----AGATCCTTT-----CATTTTAAACGTA----		tilapia
76798:	-----C..TTC..ATGA-----AAC...G.G..TAA.TATT		pufferfish
80973:	-----TG...AAC-----		zebrafish_a
120992:	-----TT..T..CTTCC-----AGT.T.A.C.G.A.TCTGT		horn_shark
160960:	ACGGTAGTG.T..G-----TAAT..C..G.G.CTCCAT		Human
154874:	-----T.GTTAGATAGTGTGCGGGGAGTGGGAGG.GG.G.T.GT----		Mouse

	84015	84032	
84001:	-ATCCATC-----TGTGTGGTAACACA-TG--TGTTGTATA		tilapia
76830:	T..A..CAG-----A.ACA.....A.T.A--...CA..T		pufferfish
80982:	-----AC...T...T.-AA--CA.CTG.AG		zebrafish_a
121024:	G.AA...AATTTAAACATCAGC.AGC..A.G..GTG-.AACA.....G.		horn_shark
160994:	T.AT..C-----G..C..ACC.TG.T-AA--..G.T..C.		Human
154914:	-GGTG..GGTGGTGATGGTGATGTCC..T...T.		Mouse

	84038	84048	84058	84068	84078	
84033:	ATA----TTTGAATCTCTTCTAAGGCCCTTGTTGGATGTTTTTCGAGTA					tilapia
76865:	G.....A..TT.G....T-----TG..A.GT..A..					pufferfish
81005:	.A-----C-----					zebrafish_a
121073:	G..ATCC...T..G..T.C..G-----CA.GACA...A.A.ACT					horn_shark
161027:	TC.-----GG.T..CACT..AC.C-----C.CA..ACTC.					Human
154997:						Mouse
165705:	..A.GC..C..C..G...T.CA....C.T..C....					Mouse

	84088	84099	84109	84119	
84079:	GCTAGTGCTATT-----TGGCTCGTACCTAAAAGTTGAGTCTTTTT				tilapia
76899:	...GTAA.GGCA-----TGTA.C..T.TC...				pufferfish
81013:	-----G.TA.G.GAC-----				zebrafish_a
121113:	A..G.AA.GGCA-----TGA....T.A.CAA.				horn_shark
161057:	C.CTCCA.AGCC-----C.AT.T..G.TG.GTTC....TCT...C.				Human
154999:	.T..ACA..GC.TACACATCG.CA..G.CG.T.CCCGA.A.G..T.G.GC				Mouse

	84131	84141	84151	84161	
84120:	GCA-----CAGACACAGTACAGTCTCAAGGCATGTGTACACTTTGAT				tilapia
76925:	-----TTA.TG..T..TTCGT-----TG..G...A.TG..TC.				pufferfish
81023:	-----TT...T.AC.ATA.AG.CTA.T...CA....ACA---				zebrafish_a
121141:	...GCAAAA--.TA..C...C.ATCC----.A...CT...CACA....				horn_shark
161098:	-----TTAC.TG...GTT.C.ATG.A..G....GGG.A.C.C.A				Human
155049:	T.GCTGAGTAGTTA..CG.A..TT.C.....-T..G.GCA.TC.G...				Mouse

	84171	84181	84191		
84162:	CAGAGAAGAAAAACCCTCTTCTTCCGAGT-----				tilapia
76958:	.G..A..AGCC...TAT..GA.GAGA.T.A.ATGTACAGTAAGTGGGCTT				pufferfish
81059:	-----TT.AT..A...TTCT-----				zebrafish_a
121183:	-----TGT..TC.AAAT.TGCC-----CT				horn_shark
161137:	GTCGATTT....TTTTTA.A.T.C.GTCTC-----				Human
155098:	A.AG.TTT..G.TTTTTT.T..AA..TTTTC-----				Mouse

			HoxA1a:2		
	84199	84209	84226	84236	
84193:	---TACAGTGATTTGTTTTCTGTTTGC---AGGGAGGTCTGGTGAGTAT				tilapia
77008:	TACATGTTCA.A.GC.G.CT..T.A..T---...C.....A..A...				pufferfish
81075:	-----CA..CT..C.C.TA---...A.AAG...G.....				zebrafish_a
121202:	GAC.TTT...C..C...TACTGA.TT---...A.A.G...A.....				horn_shark
161168:	-----A.G.C..C..AC...CCC....AAGT...A.....C				Human
155129:	-----CTC..C.TCCCC.A.CCT....AAGT...A.....C				Mouse

	HoxA1a:2					
	84246	84256	84266	84276	84286	
84237:	GGTTATGCTGGTCAGCCGAACACGGTCCGGACCAACTTCACAACCAAACA					tilapia
77055:	..C...GA..G.....C.....C.....G..					pufferfish
81110:	..A.T..G...G...A...T..A..C...T..TT.G..A...					zebrafish_a
121249:	...T...C.....C..T...GA.A...T...C...G..					horn_shark
161207:	..C..CCTG...A..C..G...G..C.....T...G..					Human
155167:	..C..C.TG...A..C..G.A..G..C...T...C...G..					Mouse

	HoxA1a:2					
	84296	84306	84316	84326	84336	
84287:	GCTGACGGAACTAGAGAAGGAATTCCACTTCAACAAGTACCTGACCCGGG					tilapia
77105:	A..G..G..A..A.....T.....T..					pufferfish
81160:	A..G..T..A...G..T..T...T...T...T..C.					zebrafish_a
121299:	A..A...G..G...A..G.....T...T...					horn_shark
161257:	..C.....G.....G.....G..C.					Human
155217:	..C..A..G..G.....G.....T..A..A.					Mouse

HoxA1a:2

	84346	84356	84366	84376	84386	
84337:	CGCGCCGTGTAGAGATTGCAGCCGCGCTGCAACTGAATGAGACTCAGGTG					tilapia
77155:	.A..G..C..T.....C.....T.A..G..C.....A..T					pufferfish
81210:	.AA.G..C..G.....C..G..TT.T..C...T.....					zebrafish_a
121349:	.CA.G..G..G..A..C..T..T..C..C..G..C..C..A..C....A					horn_shark
161307:	.C...A.G..G.....C..T..AT.C.....G..C..C.....C..A...					Human
155267:	A.G..G.....C..GT.C..A..G..C.....C.....					Mouse

HoxA1a:2

	84396	84406	84416	84426	84436	
84387:	AAAATTTGGTTCCAGAACC GGAGGATGAAGCAGAAAAAGCGAGAAAAAGA					tilapia
77205:	T.....A..G..AA.G....G..					pufferfish
81260:	..G..A.....T..A..T..CC.T....A..A..G....C.....G..					zebrafish_a
121399:	T.....C.....A..G....G..					horn_shark
161357:	..G..C.....CC.A.....A..G..A..T..G..G..					Human
155317:	..G..C.....T..CC.C.....G.....T..G..G..					Mouse

HoxA1a:2

	84446	84456	84466	84477	
84437:	AGGGCTGCTGCCAGCCAACTTACATCCTCGGAC-----AGCAGTC				tilapia
77255:	A.....A.....C.....A.....TCCGGGGAG..G.A..				pufferfish
81310:	...T..TT...GAAATCTT.GT.CGAACA.A.A-----GATG...				zebrafish_a
121449:	G..T..TACCT...TTCT.CGG.CA.GC.T-----G.G...G				horn_shark
161407:	G..T..CT...CAT.TCT.CGG.CA..C..CCA-----G.A.ACG				Human
155367:	G....C....CAT.TCC.C.G.CA.TC.TCCT-----G...CG				Mouse

HoxA1a:2

	84487	84497	84507	84517	84527	
84478:	AGGAGAAAATGGACGATGCAGCATCCGAGAAATCTATCTCAGCCCCATCT					tilapia
77305:	G.T..A....G..A...A.....G..CG....C..T..C..C					pufferfish
81351:	TC..A....CA..G....T...A..G..GCC...T..A....C					zebrafish_a
121487:	.A.CA..C.CA..A..C---A.C..A..C....G..A..TA..T...G					horn_shark
161448:	.C.....GGCC..G..A---T.C..A.....G..C.G..TT.G..C.GC					Human
155408:	.T.....C...A..A---T....T.....G.C.CT.G..CAG.					Mouse

HoxA1a:2

	84537	84547	84554	84564	
84528:	ACTCCTTCTCCACATCCTCCACTG-----TGTCTTCCACGG				tilapia
77355:	..C..G.....G..A....G-----A....T.				pufferfish
81398:	..G..C....TT..C.				zebrafish_a
121534:	..C..C..C..AT...A..T..				horn_shark
161495:	GT.....C..GGGG..T..T..CTCAGACACTCTGAC.AC..C...T.				Human
155455:	G.C.....GG....G..T..CTCAGACACTCTGAC.AC..C...T.				Mouse

HoxA1a:2

	84574	84584	84594	84604	84614	
84565:	GGGCTGATCCTTTTCGCTCCAACTGAGGGTCAAGTGACCCCTTTACCTCT					tilapia
77389:	C...T.C.ATC.....A.A.AG.GT-----C					pufferfish
161545:	A...G.C...					Human
162934:	A.....GAT..TG.					Human
155505:	A....AC...					Mouse

84615:	ATAGGTCA--AGGCGGCCTGTGTATACCAAAATTCCATACA-AGTGTATCA	tilapia
77423:	G.T.....TC....CA.....A.....G.T....A.C.A..CG...	pufferfish
84662:	AAGGCAAAAATTTGT-TAATGGATGACAGTTGTGCCCATACATGCTGTGA	tilapia
77469:	.GAA....GT.GA..GG.....G.....A.A..CA..C	pufferfish
84711:	ACAATGCACTATTGGGGAAC-TCAC---GGACCACTTCTGGACC--ATAT	tilapia
77508:	..T..ATGGC..G.TC..CTG....ATG...TT.T...C..GTTTA.C.A	pufferfish
84755:	TCGTTTTATATTGTGTGTTGTGTTTGCAAGATCTATAGCCTTGCTGCCAT	tilapia
77558:	GA.....C.....T.....	pufferfish
84805:	AAAAAACAAAGTGCATTGGTTAAAGTCTGTCCATTCGCTTTTGAAATTGT	tilapia
77586:	G.CGG..G.....	pufferfish
84855:	AATTCGCCACAATTATGCTGTGCAAGAGACACTCAGCGCCATCTTTAAGT	tilapia
77595:	-----CA..TCT.G...GA.AT..GG-----	pufferfish
84905:	TTGCCTCTGAAGAGGCAAGTGTACAAAATCTGCACTCACAAATACCTCAG	tilapia
77622:	--AT..G...T.....AGT.-----T.....AG.TGC.....A	pufferfish
84955:	ATTTGCCAAACTTGTGCAC---CCCAGCCAGGCTGATTGCACCGGATGCC	tilapia
77667:	.AG...T...GA.....GTATGT.....T.....TA....T.	pufferfish
85002:	ATCAATTAGGCATCACACAATCAACGAGATAACCTCGGTTATCAAATCGT	tilapia
77710:	G...G...A.....AC..A.AGC.....T..G.--.G..AA	pufferfish
82974:	A...TCG..A.GCTG...TA.	zebrafish_b
85052:	TAATGAGTACACTGTTCCAGTAGCCACTTAAACACTGTCTCTTCTGTGTT	tilapia
77749:	C.-----G.T.....G.C..G.-----	pufferfish
83003:	A.C..G....G...	zebrafish_b
85102:	TCAGGCCTGTGTGTGTCAACTGTTTGTCTGTTGCGTGA-----GGTTTGC	tilapia
77776:	.G.....GG...A...TT.....A....	pufferfish
81898:	GTT.....T....	zebrafish_a
156436:	G..A.T.....CTAGTCT.C...	Mouse

	85156	85166	85176	85186	85196	
85147:	ATGATGCGTAA	TGCTTTCA	TGTATTAT	AGTGAGAAG	CTGAGTTT	ATCA
77811:	C...GT.....	C..G.....	C.G.GC.....			
81915:	.GC..A..C...TG.C.G.A..TG.TC.CCG.T..T.....					
156464:	...TC..AC....T.C.G....CCCTGA.A.ATC.CA.....C.....					

tilapia
pufferfish
zebrafish_a
Mouse

	85210	85218	85227	
85197:	GTTG-----CGGAATCGGTCATTTT--ATGGCT-TTGTACGTTTGAA--			
77861:	GC.CT....G..CA..A-----T...CCTG--			
81965:	..C-----			
156514:	...ATTCTTTGT..GC.TA.G..AG.CTCCATT.AC....AA.CATGAA			

tilapia
pufferfish
zebrafish_a
Mouse

	85243	85252	85262	85272	85279	
85236:	--GCTTTAACTGCTA-GCTGTTGAATCGAGTGAAGCACAC---					
77894:	--.....T.T...T..TA.ACC..GTGTA.A.....TTTGC.T.T.					
156564:	CA...C.G.-----A.CC..G.GT.-----					

tilapia
pufferfish
Mouse

	85289	85299	85309	85319	85329	
85280:	TTAGTCCAGAGAGACGTTTACGGGTCAATCATGTGTATTAAAGTGCGTTT					
77942:	..G...A...TT-G.....T..C...GCGG.A.....					
156587:	G.G.....CAGA.....					
164685:				C.G....AC.C		

tilapia
pufferfish
Mouse
Mouse

	85339	85349	85359	85369	85379	
85330:	ACCTCTAAAATTTTCTCTGTGTCAATTTCCAAGGGGAGAGTGTGCTGC					
77991:	TG.C.----.A.A...T...T...AT.....A..TCT..GAA..A					
164706:	G..TG----.GTA.T....GGAGGT..GAA.-----G...T.					

tilapia
pufferfish
Mouse

	85388	85398	85408	85418	85428	
85380:	AGACTT-TTGATTCGTTGTGTCAGAGCAAATGCTGTGGTTAAAATTTTCCTA					
78037:	.AG..AT..A.GAG..CT.T.A.C..G..AT.-CCACCC....CCG..C.					
164746:	..T...					

tilapia
pufferfish
Mouse

	85438	85447	85457	85467	85477	
85429:	AACCCAGCAGA-CAGAAAAGCAAACCTATGTTTCATTTCCAACCCCTGAG					
78086:	.T.AG.A..A.T.CACG.....GAGC.C.....					

tilapia
pufferfish

	85487	85497	85507	85517	85527	
85478:	AAGCTGCACGCTGCTTGACTCAACCCCAAAGTCTCTAAATGTATGCA					
78122:	C.A.AC...AT.C..-...TT..A.GG.G.GGG.AT.....G					
82297:				..A....G		

tilapia
pufferfish
zebrafish_a

	85537	85547	85556	85566	85576	
85528:	GCCATGCGCGCCACTGTCCCC-GGGGTAAAGATTTACTGGCATAAGAAAG					
78171:	T.TC.....TC.C.....T-..A.....A...T.....					
82306:	T..GC.T.T.GTT..T...T.A...ACG...TGA..T.....C.TT.--					

tilapia
pufferfish
zebrafish_a

	85586	85596	85606	85616	85626	
85577:	GCATGTTTATCCAGGGCAAAGATGAGAGCGAGGACGTCAGCGTCATCTGT					
78220:	...A.....GG.....C.....G.....T...					
82354:	C.AT.G.-.GAT.C..A.T.CT....C...T..TC.C					

tilapia
pufferfish
zebrafish_a

85636	85646	85656	85666	
85627:	GATGACAACCTTATCGAGCACTTGGCTTATTGAAGGGACAAAAAGAAA--	tilapia		
78270:	T..G.A.....GA.A.....A..CAA	pufferfish		
82403:	.G.....C...T..C.TG..A.T....C....A..A.C...A..CAT	zebrafish_a		
85681	85691	85700	85709	85719
85675:	---CTATTGATTAAACATCGAGGTTA-GGCTATTGAC-AAGCATGGTGC	tilapia		
78320:	ACT.....C.....G.....C...TGG.G....G..	pufferfish		
82453:	GA-.G..C.....T....	zebrafish_a		
85729	85739	85749	85759	85769
85720:	CCCCGCTGGTCCTGTCATCCCCCCCCCTCACCACAAGTTACACGGCGG	tilapia		
78370:	AAA.CC.....-G.GTTAA.TTT....TC.G.....T.A..	pufferfish		
166314:	...C...CCT.....T..	Mouse		
85779	85789	85799	85809	85819
85770:	TGTCATCATCCCACCTGATGACAAGCCGAAGTGTGACAAGTTGCAGCAT	tilapia		
78419:	T.....-----A...A.C...T....T.	pufferfish		
85829	85839	85849	85859	85869
85820:	CGCATGTCATAATTGTGTGTGCACAACACTGCTTTGACCAGAGTATTTAT	tilapia		
78461:	T....A...-----A.C.G...GA..CG.T.	pufferfish		
85879	85889	85899	85909	85919
85870:	ATTTTCGAGCTTATGTCAGCTGTCAGATGGAGAGAGACAGACTCATCTTAT	tilapia		
78487:	-----C..-----A.G...-T.A..	pufferfish		
85929	85939	85949	85959	85969
85920:	TTAAAAATATGCTATTTGGTCATTTGAGTTTTTCATCTGATATCGATTATG	tilapia		
78509:	...GGTGC..TT....C--...AAG.G.A...TT.TAA...C.-----	pufferfish		
85979	85989	85999	86009	86019
85970:	TTGCTTTGGAAAATAAACTCACGTTATGAGTGCAATAAGCGACCCTTGCA	tilapia		
78550:	-----T..TC.....-----CGGA.A.GTT.....	pufferfish		
86029	86039	86049	86059	86069
86020:	ATGATGTATTTGAAGTGGGAGCAAAATTGGATGCATTTTTTTTTTAAAGT	tilapia		
78577:	G-----...AC...CTCT...-----G..T..C...G.C.A..CTC	pufferfish		
86079	86089	86099	86109	86119
86070:	GCTCTATTCAAGCTAACCTATATCCCATTTTCAAACATAAAAGAGGGTTT	tilapia		
78613:	..-----	pufferfish		
86129	86139	86149	86159	86169
86120:	CCTGGTTCTTTTGTGCTTTAATTCCTGGTGTGCACGATGCGAGGCCATC	tilapia		
78621:	---A.....-..T.....GCC.....AT.....	pufferfish		
86179	86189	86199	86209	86219
86170:	GTACCATAAAAGGGCAAAGAGGCGCCAAAAGAGCCATGATTAATGAGCAA	tilapia		
78667:	TG.....G...-.....A.....C.	pufferfish		

86220:	86229	86239	86249	86257	86267	
86220:	CATTCTCCTTTACCTTCGGATCCACCTGCGGGAGC	--TGCTATATTTGAG				tilapia
78716:	AG...A.....-A....G.....A....GTCA.C.CTG.G...					pufferfish
86268:	86277	86287	86297	86307	86317	
86268:	CTGCGGGGACCTGCTGAGGCAGCAGCGCAGACTGCTCTGTCCAATTCAGC					tilapia
78765:	...T.....-.....G.T.T-.G.....-.....					pufferfish
86318:	86327	86337	86347	86357	86364	
86318:	CTTAACAAACACGGAGAAGGAGCGTAAGTTACGTGGACAA---	TCTGTCT				tilapia
78796:	-----A..AA.....TTAC.C....AAG....AT.					pufferfish
86365:	86374	86383	86391			
86365:	TTTATTCGTCTC-----AAGTCTAT-TTA-----TTGT					tilapia
78828:	.A.T.A..G.A.ATTTATGGGCA.....G...CCTTCACAGTC....					pufferfish
86392:	86401	86411	86430	86440		
86392:	CGGCAGGCGGTGCGTCTCGTTTTCTACA-GAGGACAAAGGATGTTTTGT					tilapia
78878:	AA.T.AT.A.-----T.CTT.....TT.A.C.-----					pufferfish
120548:	..A..A.....					zebrafish_a
86441:	86450	86460	86470	86480	86490	
86441:	ATAAATCCTAACAAGGTTATTTTGGTAACTACAGGTACCCTCATTTTGCT					tilapia
78915:	-----G..G..A.GCGA.A-....GG...ACG.....T.					pufferfish
120560:	.A.TC.TT.....AA.C..A..A..					zebrafish_a
86491:	86500	86510	86525	86535		
86491:	TTTCGAGAAGTTGTTTCGGTATAAATA-----ATCCGTACACAGACTTGT					tilapia
78956:	GGA...ACTC.....TCTACT.GT....G....A...					pufferfish
86536:	86559	86569	86579			
86536:	TGCTCG----GGGCCTGT--TTTGGAGACCAGTCTAATTGAGAACAGAAG					tilapia
79006:	AGTT..ATT...CC...T.T.GT..ACT....-A..G..G.A					pufferfish
86580:	86589	86599	86609	86619	86629	
86580:	GGCTGGGGGGAAAATCTCAAACCTCTGGAAATATTCATTTTATTTGCATT					tilapia
79053:	AA..T...CTT...GT.T.GG..ATG...T.A.---CAG.G.C.A.---					pufferfish
86630:	86639	86649	86659	86669	86679	
86630:	AGAAAAAAAAATAGATTTACCAAAACCGCATACAAGCGTTCAGTATTAAT					tilapia
79097:	-C.G.TAATTC.AG..G....AG.GC..G					pufferfish
173413:	AAA...GA....A..A....A....					Human
86680:	86689	86699	86709	86719	86729	
86680:	TTAAATGAACGCTAATGACAGCTACCCCCCCCCCCCCCTTCCAGGA					tilapia
79130:	..G.G-A...AAG.T....AA-----					pufferfish
105350:	CA...					horn_shark
164974:	G...TT.T..TG.....T.C..T..TT					Human
173442:	.....					Human
173154:	G.TT....CTG.TT.....A...A...CTTT.CT					Mouse

	86739	86749	86759	86769	86779	
86730:	TTT	TA	ACT	GG	A	tilapia
79151:	-	...	TG	TT	G	pufferfish
165006:	..	C				Human
173194:	...					Mouse

	86789	86799	86809	86819	86829	
86780:	TAG	TT	AC	AG	T	tilapia
79198:	C	TC	G	..	A	pufferfish

	86837	86847	86857	86863	86873	
86830:	TT	AG	GC	G	..	tilapia
79227:	.C	...	T	CC	GG	pufferfish

	86883	86893	86903	86912	86922	
86874:	CT	G	A	A	AG	tilapia
79275:	-	...	T	..	..	pufferfish

	86932	86942	86952	86962	86972	
86923:	TG	AT	CT	AC	T	tilapia
79314:	..	T	..	..	..	pufferfish

	86982	86992	87002	87012		
86973:	A	A	C	C	A	tilapia
79346:	-	...	CG	..	T	pufferfish
166838:						Mouse

	87036	87046	87056		
87020:	-	AA	TT	A	tilapia
79384:	-	..	TT	A	pufferfish
166856:	A	TT	..	T	Mouse

	87066	87076	87086	87096	87106	
87057:	A	A	T	T	A	tilapia
79429:	-	...	C	C	..	pufferfish

	87116	87126	87136	87144		
87107:	G	T	T	G	C	tilapia
79467:	A	A	A	T	T	pufferfish

	87154	87164	87174	87184	87191	
87145:	CG	G	T	A	T	tilapia
79514:	A	A	A	..	..	pufferfish
186941:						Mouse

	87201	87211	87221	87231	87241	
87192:	TT	T	T	T	T	tilapia
79563:	...	A	..	TA	..	pufferfish

	87251	87253	87263	87273	87283	
87242:	TTATCTCAAGT	-----	TTATGTTGTAAGTTAATGGTGAAGAAATTTT			tilapia
79609:	..T.TC.G.T.AAAAATAG..TCT.....	----	A.ACG.GGG...A			pufferfish
176521:			A.....C..			Mouse

	87293	87303	87313	87323	87333	
87284:	ACTTTTTATATACTTTTTGCCTTACTCAATTTACCCCATGTCGTCAGTG					tilapia
79656:	TAA..ACC---G..G....TT..GT.GT....G.T..TTCT..AC.----					pufferfish
176533:	TT.....C.T.T.....T.T..					Mouse

	87343	87353	87363	87373	87383	
87334:	AAAGAAAGGTATCTGTGTTAAAGCAGACCTTTAAATCCCTTCAAGGACCC					tilapia
79699:	-----				...T	pufferfish

	87393	87403	87413		87429	
87384:	TTGGGTGTCCCTGGACCCCAAGTTTTTAGGTTCTCTGAA----				GACCCCGT	tilapia
79703:	..C.C....T.-----	C.....AAAAAC.A...	TTTCTT.TT.A.			pufferfish

	87439	87449	87456		87469	
87430:	GCGCTCTAGAAGCCATACAGAGTGG---	GGGGAAACA-----	CTGAAA			tilapia
79744:	GC.G---	G.....C..ATTA.A..CG..GCTGATC..C...				pufferfish

	87475	87485	87495	87505	87515	
87470:	AAAAA----	AGGGTCAATCCTCGGTCACGGTTTGACTTTTGTTGTCACAG				tilapia
79791:	.GGGGCTGC.....	C..C.....AACC...-G.....				pufferfish

	87525	87535	87545	87555	87565	
87516:	CACCACCCAAAGCTAAACAACAGTTTACTGGGTAAACAAGCACCTTAACA					tilapia
79840:	..G...G.TG.C.....	G.....-A..A.....AG....				pufferfish

	87575	87585	87595	87605		
87566:	ATGCATTACAGTTCATCTACGACGGCCTGTTTGACCAAAACACTTT---					tilapia
79889:	.C...G.....	C..C..C.AGG.A.T.....	A.ACT			pufferfish

	87620	87630	87640	87650	87660	
87613:	--CAGACTCCATGTAAACTGTAAAAAAATGACCTCAGCGCGGTGAGAT					tilapia
79939:	CG.TA...T..C..A.-----	GGGG..A.AT..GTT-----	A..			pufferfish

	87670	87680	87690	87700	87710	
87661:	AGGGCGATTTCCTGCTCCGACCATCAGAATCCAGCACTGCGCGGCTGAT					tilapia
79979:	---.A.T....GT..C.T..C..T.....	TTG..C.A....A.....				pufferfish

	87720	87730	87740	87750	87760	
87711:	GTTTCCCATTAAGGACCTGAGATAAACACGTGGACGATGACAGATGTTTA					tilapia
80026:	.G.....GTAC.TAC.....	A.....C..G				pufferfish

	87770		87782	87792	87802	
87761:	ACTCAAACCATTAGGGC-----	TTTGGTGCGGATGACTAAAGGTTTA				tilapia
80076:	.TGA.....A...GCCGTGAA..G..AAAA....TG....AC....					pufferfish

87803:	87812	87822	87832	87842	87852	
80126:	..-----T...	CC.-.G.T..TCA.....AA.				tilapia pufferfish
87853:	87862	87872	87882	87892	87902	tilapia
87903:	87912	87922	87932	87942	87952	tilapia
87953:	87962	87972	87982	87992	88002	tilapia
88003:	88012	88022	88032	88042	88052	tilapia
88053:	88062	88072	88082	88092	88102	tilapia
88103:	88112	88122	88132	88142	88152	tilapia
88153:	88162	88172	88182	88192	88202	tilapia
88203:	88212	88222	88232	88242	88252	tilapia
88253:	88262	88272	88282	88292	88302	tilapia
88303:	88312	88322	88332	88342	88352	tilapia
88353:	88362	88372	88382	88392	88402	tilapia
88403:	88412	88422	88432	88442	88452	tilapia
88453:	88462	88472	88482	88492	88502	tilapia
83144:	ATT...A..A.....T....GA..T.TT.....					zebrafish_a
88503:	88512	88522	88532	88542	88552	tilapia

88553:	ATTAGTTTGTATTTTAGACTGTTTCGGCAACCAATTAAATACTTCGGATT	tilapia
88603:	TTTAAAAAATGTTTTAAAGTTTTATACTGCAAATAAATTATGAAACAGAC	tilapia
88653:	CATTTTTTAAAAGGTGATTTAGTTTAAAAGCTCAAGTACACTGCCTGGTGT	tilapia
88703:	TGACTGACAAATACTTTTGAAATACTTGTCGAAGCTTTCACTTTACATT	tilapia
88753:	TATTGTTGCATAAAAAAATAATTTGTGGCGGCGTCTTTCCTGCATGA	tilapia
88803:	TTTATGAGAGTCAAAGAGAAAGCAGCTGATGAAAAAAGACCCACAGGCT	tilapia
88853:	CAAACCTGAGAGCAAACAAATCTGTACGTCTATACACACATCTGCCTGGA	tilapia
88903:	AACACAGTACTGGATATAAGAAATCTAAATGTGACAGTTTGAAAGAATTA	tilapia
88953:	AGGAATGATGTTGCATGTGCAAGCACATAACGCGGCACACACACACAC	tilapia
89003:	ACACACACACACACACACACACACACACACACACGAAACACACACGA	tilapia
89053:	AAAATGGAAACATAACTCCAAAGATTGCATCTCTACAGCTGATTTAATTT	tilapia
89103:	GGATCTTTTTTCATATTTAAATTTCAAAATTTCTTGTCATGTCCATGT	tilapia
89153:	GGACAAGTTAAAGCTTTTTTAAAAGACTATTCATTTCTGATAAATCTGAT	tilapia
89203:	AAAATCTCGAAAAATAGAGGGATTGGGTTTCAAAATAAGCACATTATAGAA	tilapia
89253:	AGTTCAAAATCTGGGTCATTACACCATCCATTGCAAATTTTAATTGGACA	tilapia
89303:	CTGATATCAAAACCTGTTGCTCAAAATCCTTGTAATTAAGTTTCATTCT	tilapia

89362	89372	89382	89392	89402	
89353:	CCAGTGTGACAGAGAACTGCTGAGTAGTCTGTGCAAATACAAGGTGAAG	tilapia			
89412	89422	89432	89442	89452	
89403:	GCAGATAACTGCAGAAATAATTCTCATGTCCTCACACTCTGCAAAGTTCA	tilapia			
89462	89472	89482	89492	89502	
89453:	TTTCCTTTTTTTTACATTTTACTATGTGTGTGTGTGTGCGTATATGTGT	tilapia			
89512	89522	89532	89542	89552	
89503:	GTGAGTGAGAGTGGGTGCATGTGTTTGTGCACCTGCATGCACGCATAAAA	tilapia			
89562	89572	89582	89592	89602	
89553:	GACATTGTAGAATCAGGAAATTAAAAAGAGTAAACATCAGCTAGGCATTG	tilapia			
89612	89622	89632	89642	89652	
89603:	CAAACAATGATGCAGAGATATGACCACAAACAGTAATATTCTTTTCAAGG	tilapia			
89662	89672	89682	89692	89702	
89653:	TCAGTGAAGATGATTGCAGAGCTTTACATATGAATAAAATGAGCAGACTG	tilapia			
89712	89722	89732	89742	89752	
89703:	TGCTATTACATATTCGAGCAAGTTGTAGTTTGTATGGTCAGCTGTGGC	tilapia			
89762	89772	89782	89792	89802	
89753:	ATTGTGCACTGCATAAACACACACACAGGCCACAGCAGAGTAAAAAAC	tilapia			
89812	89822	89832	89842	89852	
89803:	AAATTAAGAAAAGCAGAGAGCCTCTTCTCTCAGACATAAAGTGTGGA	tilapia			
89862	89872	89882	89892	89902	
89853:	CCCAGAGAGACGGAGAGACAGAAGTCACTCATCAGTGTAGTCGAGGTATT	tilapia			
89912	89922	89932	89942	89952	
89903:	GGCACATCTGCACTCATTGACCACTCCCTGTTGTGATTGGCAGCCAAA	tilapia			
89962	89972	89982	89992	90002	
89953:	TGAATTCCTCCATCGACAGATGTGCATCTCCATGTGCCGATAAAGGGACG	tilapia			
84003:	...	zebrafish_a			
90012	90022	90032	90042	90052	
90003:	GAGCCGATGGAGGGATTGACAGAATGATGGTGGAAGAGATGGAGGGGAAC	tilapia			
29088:	..GA...A..GA..G...GA..GA.A.AG....GA...A.AG.G	striped_bass			
77183:	G.....AA..C..	pufferfish			
84006:	TGT.A..GA...AA..A..G...GA..GA.A.AG....GA...A.AG.G	zebrafish_a			
190969:	..A.....G...GA..TAG...C..A...A..C.G	Mouse			

	90062	90063	90073	90083	90093	
90053:	AAGAAGAGAG	-----	GTGACATCATGTGGTTAGTAACAGTCTGTCA			tilapia
29133:	.GAG.....	AGAAACAGA.A....G				striped_bass
77201:	..A.G...					pufferfish
84056:	.GAG.....					zebrafish_a
191005:	.G.C.....					Mouse

	90103	90113	90123	90133	90143	
90094:	TGCCAGGCATGT	TAGACCATGGTCGCTAGGGTAGTTTAGGGAAGGCAGAA				tilapia

	90153	90163	90173	90183	90193	
90144:	TGTGTATTGTAATGATTAGAGGTAGGAAAAGTAGAGGTTACATGAGTAAC					tilapia

	90203	90213	90223	90233	90243	
90194:	AAAGGCTGGGTAAAGTGGTGACAGCCACATCTTGACAACAGAACTCACC					tilapia

	90253	90263	90273	90283	90293	
90244:	TCAAAGAGATGTCTGCAGTTTTCGCTGAGCCCTTTTGTGGATGAAGCA					tilapia

	90303	90313	90323	90333	90343	
90294:	CTCCTACTTCGAGTGCCAAATGGAGTTATACAAAGAGATGTGAAAAGAGA					tilapia

	90353	90363	90373	90383	90393	
90344:	AGAGCACAGCTAGGATACTTCAGCAGGTCTGAGGCCACAGGAGGAGTGA					tilapia

	90403	90413	90423	90433	90443	
90394:	GGACTAGCTAGTAGTCTAGAGACAGTGGTCCATCCATCACACAAGTTCTG					tilapia
86118:		.A...G..A.....		T-...CT.A		zebrafish_a

	90453	90463	90473	90483	90493	
90444:	ACCCCAGGTTGACCTCAGCACGGCAGCCAATGAGGCACCCCCAAACCCCC					tilapia
86150:	...T...CTG.....C....CT.....					zebrafish_a

	90503	90513	90523	90533	90543	
90494:	TAAAGAAAGCCCCCACTACACATACGCACACACTTATCTAGACACACAC					tilapia

	90553	90563	90573	90583	90593	
90544:	ACACACACACATACAGACACACACACACACACAGGAGATCGGGTGTCA					tilapia

	90603	90613	90623	90633	90643	
90594:	CCGAGGAGTCTTGATGCTCTTTGTGTTGGCCATCATCTCTTCCAGAATC					tilapia

	90653	90663	90673	90683	90693	
90644:	CTTTGTTTTAAACATGACTAATGTGAGTACCAACACCTGACAGACAGGCT					tilapia

	90703	90713	90723	90733	90743	
90694:	G TTCATCCTGTCTCTCTCTCCCTCTTTCTCTCTCACACTCCCTTTCAAAG					tilapia

	90753	90763	90773	90783	90793	
90744:	GGGAGTGTGAGAGAACACACACACACACATGCACACACACACAGGCAC					tilapia
	90803	90813	90823	90833	90843	
90794:	ACACGCACACACCCTTCAGATCAAACAGGAATTACCACAGAGAAAAATTC					tilapia
121468:		..G..T..T.CCTT.T.....T.....				zebrafish_a
	90853	90863	90873	90883	90893	
90844:	TGGCTGAAAAACTGTCAGTTAGAGTAACTGTGTGTCTTACAAATAAGAGA					tilapia
121496:	.....					zebrafish_a
	90903	90913	90923	90933	90943	
90894:	CTTGGCTCAAGGACAGTAATGCTGAATGTACAAAATATTAGGTCCTTTAA					tilapia
	90953	90963	90973	90983	90993	
90944:	AAATTAAGAACAGAGGTTTATTGACTCTATAGAATAGTTGAAAATAGAGA					tilapia
	91003	91013	91023	91033	91043	
90994:	CCATCGAGAACCATAGACCACGAGTTCTCACACCAGTCATCTTCAAATC					tilapia
	91053	91063	91073	91083	91093	
91044:	TTTTGACGTCATACAATTAAGGAAGATTGCGACACTACTCTGCTGACGA					tilapia
	91103	91113	91123	91133	91143	
91094:	AATCTGTCCATGTTAACACCTGCCAAATAGTCAAAGCTGCCTTTGTGGTG					tilapia
	91153	91163	91173	91183	91193	
91144:	GATCCAACACTACAGTTGGTCTGACTGAATTTTGCCATAATGCCAAAGCATT					tilapia
	DNA →					
	91203	91213	91223	91233	91243	
91194:	TCAGTAGGGTTGAGGTCTGGACTTTGACTGTACCTTTGAAACGCCTTGAC					tilapia
	DNA →					
	91253	91263	91273	91283	91293	
91244:	TCTTGCTTTCTTCAGTAATTCTGTTGATTTGCTGCTGTGCTTGGGATCAT					tilapia
	DNA →					
	91303	91313	91323	91333	91343	
91294:	AGTCCTTTTGCACAACCCAATTTGGACCCAACCTTAGCTCTCAGATAGAT					tilapia
	91353	91363	91373	91383	91393	
91344:	AGCCTCACATTTGACTCTAGAATATTACAAATGCTACTCTAGCATAAAGA					tilapia

91403	91413	91423	91433	91443	
91394:	TGGATT	CATGCT	CGACAC	GATAAC	GACAAGGTACCCGGGTCCTGTGGCTG tilapia
91453	91463	91473	91483	91493	
91444:	CAAAACAAGCCCAGAT	CATCAT	CCCTCAAC	CACAGTGCTTGACAGTTGGT tilapia	
91503	91513	91523	91533	91543	
91494:	ATGAGGTGTTTGTG	CAAATATG	CTAAGTTTGGTTTTCTACAAATGTGGCG tilapia		
91553	91563	91573	91583	91593	
91544:	CTGTGCATTATGGT	CAAACATCTCTACTTTGATCTTGTGTTCAAAGGACA tilapia			
91603	91613	91623	91633	91643	
91594:	TTCTTTGTCTTGAGGTTTCTT	CAGCTGCAGTTTTGAAAACCTAAGCCATG tilapia			
91653	91663	91673	91683	91693	
91644:	CTGCCATGTTCTTTTGAGTGAGATTGTTTTTTTACAATTTCTCTGAGAA tilapia				
91703	91713	91723	91733	91743	
91694:	TTGCAGTCTTACACTGGCGTGAAGTTGTTGGGACATCCGCTCCTGAGAGG tilapia				
91753	91763	91773	91783	91793	
91744:	ACTGATGACAATCTTGAAACATTTTCCACTTGTGACTCTTTCTCACTGCA tilapia				
91803	91813	91823	91833	91843	
91794:	GAATGACCAATCACTTTGGAATTGATTGGAATGATCCTATAACTGTTAG tilapia				
91853	91863	91873	91883	91893	
91844:	GATCTAAAGTCATTGCTGATGCCTTTTCTTTTGGCATTGTGCAAACATA tilapia				
91903	91913	91923	91933	91943	
91894:	CATCTAAATGCTCCAGACCAGCAAAC	TGCCAAACTTCTGCTTTCATGGA tilapia			
91953	91963	91973	91983	91993	
91944:	GGCGGTCATACTTGTGATGATCAGTTATCACTTGGATTTGACTAGCAGC tilapia				
92003	92013	92023	92033	92043	
91994:	ACCTGGCTTCTACTTACACTCTCGATTTCTAAAAATAAGAAGAAGTGAGG tilapia				
92053	92063	92073	92083	92093	
92044:	GTGCACTTAGATTTTTACAAGACTGCGCAAAGTCCTTTTCCCTATGACAC tilapia				
92103	92113	92123	92133	92143	
92094:	AACCTGCCAAACTAGACCTTTAAACTGATTTCTTGAAGTTGGTCTTTTG tilapia				
92153	92163	92173	92183	92193	
92144:	TTTGTTTTTTTCATCGTGGCAGACTCCAAAAACTGAAATGATATTTTGAG tilapia				

92203	92213	92223	92233	92243	
92194:	TTGTACTATA	ACTACCTTAGAACCTGCCCTTCATTTTGGTGTGAAGGTAT			tilapia
105633:			...A...AC...A...		horn_shark
92253	92263	92273	92283	92293	
92244:	GCTTTTAAAGTTCAAAGATCATGTCCACTGTATGGTTACAAAATCTGTCC				tilapia
105649:	.G.....G..				horn_shark
92303	92313	92323	92333	92343	
92294:	ACACTGAAAAAGATAAACATCTGCCAAAGACACATTTTCGCAATGATGATA				tilapia
98888:			.G.TG.....		zebrafish_a
92353	92363	92371	92381	92391	
92344:	TTCTTAAATAAGATGAAAAACA--AGAAAAATAATTCAGCCAAAATTTTCATG				tilapia
98898:	..TA...TA...G.....A.AG.....G....G...				zebrafish_a
92401	92411	92421	92431	92441	
92392:	TCAGGCAAAAAGTTTTCTATACTTACTGTAATCAGGCTACACCACCTTCT				tilapia
92451	92461	92471	92481	92491	
92442:	TTTAGATAGGTATACCTAGAAAAATGGAATAAAAAGTTACAGCTAATCTA				tilapia
92501	92511	92521	92531	92541	
92492:	TTACTTACTACTTATTATTCTCATACTTGTAATATGATGTAAAGTCCAAC				tilapia
92551	92561	92571	92581	92591	
92542:	CAAGTGTAAGACCACAAGGTATATTTGCTCAGCTCAATCACTCAGTATTT				tilapia
92601	92611	92621	92631	92641	
92592:	TTTATATGCATTTTCCTTTGTACATGTTGTGCTTACCCATGCCTTTTGTTA				tilapia
92651	92661	92671	92681	92691	
92642:	TGCATCTTATAGTTTTCTACTGAGCCAAAGAGTTACTGTAAGGTTAACA				tilapia
92701	92711	92721	92731	92741	
92692:	GAGCCAAAATATAATCCCATAATCTAAACTCCATGGCCAGCAGCTCTTGT				tilapia
92751	92761	92771	92781	92791	
92742:	CAATAAGCAAGTAGAGCCTGAGCCAGGCCTGATATTAAGGTCTTTGAGCC				tilapia
92801	92811	92821	92831	92841	
92792:	TTTGGTCTCATGAATAAGTAGACAGATGAAGTAGCAAATGCTGAAACAGC				tilapia
92851	92861	92871	92881	92891	
92842:	CTCAAGCAGGTAATTGCTAACATATCAAAGCAAAAAAACACAGAGCTATA				tilapia
92901	92911	92921	92931	92941	
92892:	GTCATAGTTTTACAAACAGATATGAACACACACAGCTTCAAGGCACAAG				tilapia
29363:	..T.....A....T..AGG.AA....A				striped_bass

92942:	ACAGGTTTCAACACCGCTGTGTCAGCAACTGTCGGGACGTTTGAGCTCAC	tilapia
29390:	T...	striped_bass
92992:	CTGACACCGTTCTACCTGAAAACCACCTGTCAGTCTTCCCCACAGGAAGA	tilapia
93042:	CCAATCGCGGTCGTGTACATTGTGACAGAAGACCATTGGTAACACAATAT	tilapia
93092:	GAGGAAGATTAGGGAGCAATTTGTGCGTTAACTGACACAAAATGGAGCAT	tilapia
93142:	TCAACTTCTTTGA---TGGTTACTG-----ATATGAGTTACT	tilapia
84102:	GTG....C....TCAGGGTTTTAGT..C..G...--C	zebrafish_b
93176:	AGATCAGGTCACACCAAAGAAATTTTCAGCACTTTTTGACCCAGCTGTTG	tilapia
84143:	G...T.AC..G.T....TGG....T..A.T....	zebrafish_b
93226:	GAGTTTTTTAGATTTCTCCTCTTACATTTTTTAAGGGGAAATCACCATAT	tilapia
92689:	CACG..T.AT.T..GT..CGC.CG.C..C...G.....	zebrafish_b
93276:	TTTGATATTTTTGAACCAGACAATACCCTCAAAGACGAGTTGATCCCAAC	tilapia
92735:	...C...	zebrafish_b
93326:	TACACGACAGTGTTAGTTTGCTGTTTTGAAGCCAGAAAGAGACGCAGCAG	tilapia
93376:	TAAAGCAAGCATTGGTGTTAAATAGGCAGCAGCAATACAGAAGATTGTT	tilapia
86466:	...A..A....C..C..T.T.....GTA....	zebrafish_b
93426:	ATTGTAAAGATGTTTAAGTGACAGATGTAAGGCATAGGGTAACTCTGAGC	tilapia
93476:	CTCTAGTATGTACACACCCTGAAGCGCATAACTGTGGGAGTCAAAGAG	tilapia
93526:	CAGGAGTGAAACTGAGCACTGATAGACTTGTCCTTCAGGCAAAGAGCA	tilapia
106804:	AG....TG..G.G.GT..T.TTT..C.....TG...T..	horn_shark
93576:	ATTTACATTTTCACTTCTAACTGTAAGCTTAGCGAGACAAATTGATGCT	tilapia
106847:	G-...TT...A.A.T..TC..	horn_shark

93635	93645	93655	93665	93675	
93626:	CAGTTAAATCTCTAACACACTGTGTGTAAGCACAGAGTACTTGCTTTGCT				tilapia
93685	93695	93705	93715	93725	
93676:	TTTTCCTTACAACACTTTTTGGTGTTGAGATGTTGACAGAGCAGAAGTGGG				tilapia
93735	93745	93755	93765	93775	
93726:	CAGCCTCCCTTTTTTCGTATTCAGGTTCAAGACCTTCCCGGCTTATCTGA				tilapia
93785	93795	93805	93815	93825	
93776:	TGTAAC TACTTACTGTATATAGTTTGT CATGAGTAACCCATTTTCAAGCA				tilapia
93835	93845	93855	93865	93875	
93826:	TACCCAGTGTTTTGGCAATGGAAGTAGTTTGAGCATTTCTATATCCAGT				tilapia
92818:			.A..G....GC.A...A.		zebrafish_b
112593:			...T.		horn_shark
93885	93895	93905	93915	93925	
93876:	TGTGGTATAATGTGGACTGTACATTGCACAGACTGGTAAAAGTGCTTTTC				tilapia
92836:	CA.....A...T.AA.G....T...				zebrafish_b
112598:	C.ATT.TAA.GACT..T.....TGT.CTC...GT....A..T				horn_shark
93935	93945	93955	93965	93975	
93926:	AGTTTTCTATGTCATTTACAGTAAATTGGGCAGAAACAAGTGGCTATATA				tilapia
112648:	.A....GC...				horn_shark
93985	93995	94005	94015	94025	
93976:	GAAATGAATCATTGCATTGATTCACTTGTAAATTTTGTCTTTTTTTATTAG				tilapia
177257:		..A.TG....T.G....G.....TT			Mouse
94035	94045	94055	94065	94075	
94026:	GTTTTATTTTTAAAAGAAACATATATTGTACATCCAGTGACTCACTGCTC				tilapia
177282:	G.....G.G.C.G.				Mouse
94085	94095	94105	94115	94125	
94076:	TGCAATTAACCAAACATAAAATCTAAAATATTTAAAAGATAATTGCATTAAA				tilapia
94135	94145	94155	94165	94175	
94126:	ATACTCCTTACAGTGCCAATAACACAAATACAGATGAGAGGTAGAGTTCA				tilapia
94185	94195	94205	94215	94225	
94176:	GGGGTTTGATTTCAGCTGAAGTAAAGCCTAGCAAACCTGGACATTTTTTACA				tilapia
94235	94245	94255	94265	94275	
94226:	TGGAATCTGTAGAGATTTGCTCACTTATGGGACCAATCACAAAGTGGCCAT				tilapia
94285	94295	94305	94315	94325	
94276:	TAGAGGAAGTGC GGTTTCTAGCGTTTCCTAAGATCATCAGGGGGTCCTTT				tilapia

94326:	94335	94345	94355	94365	94375	tilapia
	GTCCCTCTTTGGGGGAAACTCCCACTGGGTTTAAATCTGGGACTCTCCA					
94376:	94385	94395	94405	94415	94425	tilapia
	CCATTGACCCTTAGAACTGAAGAAGCTTCTCGGATGAGAGGTGAAACGTC					
94426:	94435	94445	94455	94465	94475	tilapia
	TTCAAGCAAGTCAAAGAAGTCCAGACACTTTTCTTTCCAAGCTCCTTAGA					
94476:	94485	94495	94505	94515	94525	tilapia
	CTACGATGACCTGGATGACTGAGAACCTTCACAGACATCTAGCGTTTCCT					
94526:	94535	94545	94555	94565	94575	tilapia
168473:	CTTTGGCATTTTTTTTTTCTTTTTTAGAGAATGCCTTGGGGTTAGCAACA					Human
	.A...C.....TC....G...CGGA.T..A..					
94576:	94585	94595	94605	94615	94625	tilapia
	ACTTATTCTGATGACATTTGTTGTCAATGTCATCTCATACAATTAAGTTG					
94626:	94635	94645	94655	94665	94675	tilapia
	TCAGGTAATCCATTTATTGGCGATTTGCCCTTTGATGCACAAAACGTGTC					
94676:	94685	94695	94705	94715	94725	tilapia
	TTTACTACCCTTGCTTTTCTGTGGTGTGTCATGTGGCCACACAACATACTTG					
94726:	94735	94745	94755	94765	94775	tilapia
	ATGTGAATTTTTCAGTCCTGACAATTAGCTTAATAGATACATAGGAGTGC					
94776:	94785	94795	94805	94815	94825	tilapia
	TTTGATGACCCAGACATACCTGTCGGCCATGAAATGTCGACAAGTCTCAC					
94826:	94835	94845	94855	94865	94875	tilapia
	TGCCTTTGGAAGTTCCTACAACTGTCATCACTTGGTCTGATCTTAATTT					
94876:	94885	94895	94905	94915	94925	tilapia
	AAAGTCTGTCAATAGGATCTGATCAAAGCACACCAGATTTGCTTTCCTGC					
94926:	94935	94945	94955	94965	94975	tilapia
	TTTCACTCTGTTTGTTAAAGAAAATGATGCAGAAAATTGTTTGCTCTTAG					
94976:	94985	94995	95005	95015	95025	tilapia
	TTTCAGTGTTTATAATTCCCTTGGTGCGTGTGTTGTAAGTGCCAAGTACTG					
95026:	95035	95045	95055	95065	95075	tilapia
	TAGTTCCCACTTTAAAAATCCCCTGAATCTGTAATATTTGTTTATTTTAA					
95076:	95085	95095	95105	95115	95125	tilapia
	TAGAAGCCCAGAACTTAGATATACAATTTACATTGTTAATATTAAGC					

95135	95145	95155	95165	95175			
95126:	GGGAAAAA	TAAACATT	ACAGTTGA	AGATTTGT	ATATATAATTCAACAAGT	tilapia	
95185	95195	95205	95215	95225			
95176:	CATTAGTCT	TTTGTAGAG	TTGTCGAG	TTTAAGCT	ACTGTACACTCTTAGGT	tilapia	
95235	95245	95255	95265	95275			
95226:	GAATAACT	GAAAGCAG	GAACAG	AGATTAAG	CTGAACAGACATTAGCTGATTAA	tilapia	
95285	95295	95305	95315	95325			
95276:	GAATTA	AAAAAGT	GAAAAC	TCA	TGAGACACCCAAATGCTTTGTGTATATTG	tilapia	
95335	95345	95355	95365	95375			
95326:	AGCTAATA	AAGACTG	CAACAT	CCAACAC	CCCAAGCTTACCTGCAGACAGCT	tilapia	
95385	95395	95405	95415	95425			
95376:	GGACAGT	CATCCT	CGTCAAC	CCCCCG	CTCTTCTTCCCCCGGGCTCGTTAT	tilapia	
95435	95445	95455	95465	95475			
95426:	CATTGAG	CTCCG	CAGAGAC	TCTTCT	AATGACAGCACTTGTCTATAATGT	tilapia	
95485	95495	95505	95515	95525			
95476:	CGTTGTC	ACAGCT	CGTGTA	CGTG	TGTGTTACCTGTGTGTGTGTGTTT	tilapia	
121829:			..T..T...	TGTT.....	G.	zebrafish_a	
174988:			GT.....	GTGTG.....	G.	Human	
177875:			GT.....	GTGTG.....	G.	Mouse	
95535	95545	95555	95565	95575			
95526:	GTTTACAT	TTGTGCA	CTCAA	ACTAGT	GCATGTTTGCCCTGTAATGACAGC	tilapia	
121859:	.....					zebrafish_a	
104798:					-	zebrafish_a	
175024:	T.C.C...					Human	
177911:	..G.GTG.G....					Mouse	
95585	95593	95603	95613				
95576:	GGCTGTCT	ATAA-----	TGCCTGG	TCCTGGC	AGGGATCATT	CG	tilapia
104807:	A.....T..	GCCTGAC	CATCAC....	G.ACGT.....	-		zebrafish_a
95623	95633	95643	95653	95661			
95614:	GTCCTCC	GTCTCT	CCCACG	TCCGCT	GTCCGGT	GTACCGATGT--CCGGG	tilapia
104856:	-----	..A.GGA..	...GAC.....	A....GT.T.T.			zebrafish_a
95671	95681	95691	95701	95711			
95662:	TGGACGAT	GATGTG	ATCTTT	AGTCCC	CTCTGCGAT	CTATAGACTGGCATT	tilapia
104890:	...CT.C.....				-AT.....		zebrafish_a
95717	95727	95737	95747	95757			
95712:	TG----	GCTCAG	AGAGCG	TCCCCG	GCCCTG	ACATGCATGCTAAAGCTTG	tilapia
104939:	.TGGTC.....	AG-----	..A.A...CAGTT.....				zebrafish_a

95767	95777	95787	95797	95807	
95758:	CAGCCGTTTTGCCGATATCCCCCCCCCCCCCAACCCTGCCCGCCTA	tilapia			
95817	95827	95837	95847	95857	
95808:	ACCTTCCACAGACAGGAAGTTAACACCAGCCAGGGCAATATTAGATACTG	tilapia			
95867	95877	95887	95897	95907	
95858:	GAGTGGCAGTTTGTACTAAAGTTTGAGCCCTTGGAGGGAAAAGTATAGA	tilapia			
95917	95927	95937	95947	95957	
95908:	TGGTTTGTGCATTTAAGTATAAAATGTAATTGATTTGAGTTGCATGTCAT	tilapia			
95967	95977	95987	95997	96007	
95958:	GGAAATGCCTTTTTCATCTTTAACTTTTAATGAAGCTGATTGTATTAAAGT	tilapia			
96017	96027	96037	96047	96057	
96008:	GATTTGCTTAATTATTGACATTTTCTGCTTACAGTCAATAAACTGTTTCC	tilapia			
96067	96077	96087	96097	96107	
96058:	AGCAACAATGCAGGTTTCGCTGCACCTGATGAGGCAGTGACCTTAAAGACT	tilapia			
96117	96127	96137	96147	96157	
96108:	GCTTGTGTAAAGGAATCAAAGTCTGTGATGGTAGCATATCTGCAAATGTT	tilapia			
96167	96177	96187	96197	96207	
96158:	AGCTGGATATGCTAACATGCAGATGCTCGTTCTTGGCCTGATAAGCCAAT	tilapia			
96217	96227	96237	96247	96257	
96208:	CTGAGGTTGGGGAATAGTGTTACCACTGTAGACAGCCTATCAAATACTG	tilapia			
90765:	..AA.....A.....C...G..	zebrafish_b			
96267	96277	96287	96297	96307	
96258:	TCAGTTTGTCTGAAATGAAAATATGGTGTTTCATTTGTTGATAGAACCA	tilapia			
96317	96327	96337	96347	96357	
96308:	CCCACAACACTAGATGGCACAGCCTACGTGGCAGAGTGCTATCGTGCGCT	tilapia			
96367	96377	96387	96397	96407	
96358:	AAATTATATAGCATGCAGTATTCGTGTGGTATTTTTTCATTTACTTTGAG	tilapia			
96417	96427	96437	96447	96457	
96408:	ACAGGAGCAACAACAGGAAGCTCCTTCTTATACTTTTATTATTGCAAATA	tilapia			
122188:	..A.A..A...C.	zebrafish_a			
96467	96477	96487	96497	96507	
96458:	AAAATATAAAACCATTTCTTGTAGTTTTGAAAGTGAAGAAATTATGGTG	tilapia			
122201:	G....GG....A.....C-----.....G..A.A..AC.T..	zebrafish_a			

96517	96527	96537	96547	96557	
96508:	AATAATAATAGAAGGTACACTGGCTGTCTTTGACAAAATGACGCCAGGCA	tilapia			
96567	96577	96587	96597	96607	
96558:	TAGTACAAATCGCACAAAGTAGGGGTGCAAATGTCCAAACTTAGCAGCAA	tilapia			
96617	96627	96637	96647	96657	
96608:	GATTATCCCAGTGTTTCACTTTCTGCCAGTGCAAGAGGCTGCTAGGGTCT	tilapia			
96667	96677	96687	96697	96707	
96658:	GTGAGGTAGTCTGTACTTACCAATCAATTTTCTTCAGTCCCCACTTGGTT	tilapia			
96717	96727	96737	96747	96757	
96708:	TTGTTGTAGCAGCTTTAACC TAGAAGTGTAATTACATTAGTTACAAGCAT	tilapia			
96767	96777	96787	96797	96807	
96758:	CTCATGTCATCCCGTCTCTGCCAGACTCTACATTGTGTCTCAATTCAAAT	tilapia			
96817	96827	96837	96847	96857	
96808:	ACTTGTACTATTAGTAGATGTAATTGGTGACCCCTCCCCATTACATTGCA	tilapia			
96867	96877	96887	96897	96907	
96858:	TAGCTAAGATGGTGGCCATTAAGAGTTAGTTGTGTACAGTATTCCACATT	tilapia			
96917	96927	96937	96947	96957	
96908:	TTTTGACCATTATGGGTACCTCATCCAAATAATTAGAACA AAAAGTATAAC	tilapia			
96967	96977	96987	96997	97007	
96958:	ATTTGACACAAGATAGTTGATTGTTACTAACCATAACCTTTGATAATTGC	tilapia			
97017	97027	97037	97047	97057	
97008:	TTGCTTCTCTTGACTCATCTAGTTCTCTGTCTTTTACAGCTCAGCCTGCT	tilapia			
97067	97077	97087	97097	97107	
97058:	CCCACTCGAGTCGTACGCCAAGCAGACAAAGGAGTCACATCGAAACCAAG	tilapia			
97117	97127	97137	97147	97157	
97108:	TCAGGCACAGGATAGCCAGCTCCCACTAATCTGATGTGGTTACAGATCTT	tilapia			
97167	97177	97187	97197	97207	
97158:	TCTGAAGCTTGCAAATTTCTAAAGGCAACTACAGCCACCTCACTGCCTCC	tilapia			
97217	97227	97237	97247	97257	
97208:	CTTTTAAGAACTCTATCAGTTGTAGTCCCTGCAACAAGACAGTACGGCTA	tilapia			
97267	97277	97287	97297	97307	
97258:	TGTCCCAGCCTCTTATTATTTGCTATTTGGCACGCTGAGAAATTCACAAT	tilapia			

97308:	97317	97327	97337	97347	97357	
	⋮	⋮	⋮	⋮	⋮	
	CAGCCTTTAATTCATCTTTT	GTCATCTTCT	CCAAATTTACATCAAATTGC			tilapia
97358:	97367	97377	97387	97397	97407	
	⋮	⋮	⋮	⋮	⋮	
	ACCCAGGTTTACTTAAAGTC	CCCCACAAAAGATT	TGTGAAGTGTAAACAGA			tilapia
97408:	97417	97427	97437	97447	97457	
	⋮	⋮	⋮	⋮	⋮	
	ACTCTCTATCTCTGTAGAGT	TTTCATGAGATATCATCCATATCCAGGTTGT				tilapia
97458:	97467	97477	97487	97497	97507	
	⋮	⋮	⋮	⋮	⋮	
	ATAAAAATACATACTTGATATG	TAAGTGAATAAACAGGATTAAATG				tilapia
97508:	97517	97527	97537	97547	97557	
	⋮	⋮	⋮	⋮	⋮	
	GACAAGGTTTGAATCATTTAACATTTAATTGATTTTGT	TGTATACTGTG				tilapia
29533:				..C...T...A		striped_bass
97558:	97567	97577	97587	97597	97607	
	⋮	⋮	⋮	⋮	⋮	
	TGTTTAACCATAAAAATGATCCCATTTAGCTTATTGTATAGGCACGTTTG					tilapia
29544:		AT.....				striped_bass
182312:				C.....		Mouse
97608:	97617	97627	97637	97647	97657	
	⋮	⋮	⋮	⋮	⋮	
	TTCTGTTTGTGTGTCTGTTT	CACCTAAAAATAAGGTTTTTT	TGTCCTCTG			tilapia
182322:		G.G...C.A..A.C.....				Mouse
97658:	97667	97677	97687	97697	97707	
	⋮	⋮	⋮	⋮	⋮	
	AGTGTGTCGTGTGTGTGTGTTCTGGCTGGAGTGTGGTCCTGAGGGATTGG					tilapia
97708:	97717	97727	97737	97747	97757	
	⋮	⋮	⋮	⋮	⋮	
	TTGTGTCCACCTCTGTATCGATGCCATCACACTCTCATCTGCATACCTGA					tilapia
97758:	97767	97777	97787	97797	97807	
	⋮	⋮	⋮	⋮	⋮	
	CAGCACAGACCTTTCTTTTCATCTGCCTCTTTGCTTACTCCAGTGCAACCT					tilapia
194433:				C-----		Mouse
97808:	97817	97827	97837	97847	97857	
	⋮	⋮	⋮	⋮	⋮	
	TTTAAAGCCATTTTTTCATTTCTCATGACTTGCATGTTTTCTTTACTCAC					tilapia
194443:		GC.T.G.A...G....T....				Mouse
194444:			..T.G...A..TT.C.....T..TTT			Mouse
97858:	97867	97877	97887	97895	97905	
	⋮	⋮	⋮	⋮	⋮	
	ATTTTTTGTGTGCCTGTTGAAC	TTTTTTTTTTTAA--TTT	ACTGTCCCTT			tilapia
172280:			C...CC...C..C.TT...			Human
194473:		T.C....C..T..T.T.----	C....C..TTC...T..T.T.T..			Mouse
97906:	97915	97925	97935	97945	97955	
	⋮	⋮	⋮	⋮	⋮	
	CTCACCTCTTGTGTCTTTTTTTCTTCAGGTCAATACTGTGAGTGCTGG					tilapia
108815:			.C.T.....AA.CCCTCATCA.			zebrafish_a
172309:		...TT.TCTC.C.CTA....C.....T.				Human
194519:		.GTT..T..G.TCCT..C..CC...C.				Mouse

97965	97975	97985	97995	98005	
97956:	GGATTCAGCAGTTGCAGTTTTTAGATAAAACACCCTGTTAGCAGGATTATC	tilapia			
108841:	CTTG.C.CG..CG....C.....G..GC....TG.....G.	zebrafish_a			
98015	98025	98035	98045		
98006:	-----CCTGTTGTCCTAACAATGTAAACCTGGGATTAGACCTATC	tilapia			
108891:	ATGGTGTTAG.....AG.T..C.G.CA.....	zebrafish_a			
98055	98065	98075	98085	98095	
98046:	TCCAGGGATTATATGCACGCATGCTTGTGTGTTTGATTACGCTTACCAGCT	tilapia			
98105	98115	98125	98135	98145	
98096:	ACAAAAGGCTTCTATCAGAAATGCAAAAGGTCTTAGTAGTTGTTGCCCTG	tilapia			
98155	98165	98175	98185	98195	
98146:	AAGAATTTTATCATTTTGAAAAGGTCGCAGTGGCTCTGATATTGTTATGA	tilapia			
98205	98215	98225	98235	98245	
98196:	ACTGGAGTGCTTTGAGATGGCTGCCTTGTGACAAGGCAAATAAAACAAAT	tilapia			
112707:	C.	zebrafish_a			
185921:	..CC.....A	Mouse			
98255	98265	98275	98282	98292	
98246:	AATCAAATCAGACTACTGTAGATTTATGAAAG---AAACCACCAAGTGAC	tilapia			
112714:	C.T.TTCC...T...--.C...C...ATAC...TT..A..A..CT	zebrafish_a			
185933:	.C.A...C..A..C....G.A....	Mouse			
98302	98312	98322	98332	98342	
98293:	TAAAAATAATAAAAAATCAGCACAACCACTTGAGCTCAATGATAAATGTAT	tilapia			
112761:	C....GC..C....	zebrafish_a			
194995:	..A.....T.T...A.....A.-.	Mouse			
98352	98362	98372	98382	98392	
98343:	GTTTTTACCATTATTTTTTTTGTATTATTACGATAAATATGAATGCATTT	tilapia			
195022:	C..C.G..T...GC....	Mouse			
98402	98412	98422	98432	98442	
98393:	TGGCTGAAACTGCACATTCACATAGTCCCACGTGTTACTATTCTGTTTAT	tilapia			
77374:	C.T.A.....	pufferfish			
98452	98462	98472	98482	98492	
98443:	TTTTGTATTTGTCAAGACTGAGCACCCAATACATGGTTTAAGACTTGAGG	tilapia			
77394:	...AA.T.....	pufferfish			
98502	98512	98522	98532	98542	
98493:	CTGAGCACACTGCTATGTTGTATCATATCTTGATAAAACAAAACCACACAT	tilapia			
98552	98562	98572	98582	98592	
98543:	TGTGGTTTTATGGATTGTTAAACACCAGATTTTGTGTTTGGCCAGGTGCAG	tilapia			

98593:	98602	98612	98622	98632	98642	
	AAACGTCCTC	TTTTGCGG	TCATGTGAA	TTTCCAGGCA	ACAGACATCC	tilapia
98643:	98652	98662	98672	98682	98692	
	AAGGAAGTCA	CTGCTAATT	ACCAAACATG	GCTAATCCTC	GATTAGATGC	tilapia
98693:	98702	98712	98722	98732	98742	
	AGCCAGAGAG	TCAAACAAT	TTTCATATCT	AGAGGCAACCT	GTAGCAGTG	tilapia
98743:	98752	98762	98772	98782	98792	
	AAACCCCACT	TCAATAAAC	AGCTGTACTTT	GCAGGTTAAT	CCTGTGCTTC	tilapia
98793:	98802	98812	98822	98832	98842	
	TTCCTTTGTA	AATCCCATA	ACGTATTTTATA	AACCGTTCTC	TTTACTTGT	tilapia
98843:	98852	98862	98872	98882	98892	
	GTATACTGTAT	TTTATCCCCG	TTGTCACTAAT	GGTGAATGGG	TAAATGAT	tilapia
98893:	98902	98912	98922	98932	98942	
	AACCAAACCTG	TTAGTGAAAG	ACTGGAGGAAG	CGCTGAAAACA	AAACGAAGG	tilapia
98943:	98952	98962	98972	98982	98992	
	CAAGGAAGCA	AGTAAAGGGAT	GCTTAAGAAAG	CAGGGTGAGT	GCTGTGGT	tilapia
98993:	99002	99012	99022	99032	99042	
	GGAGATGAGG	AGGTGCAAGGT	CAAAGGTCAACT	CCCCTAGTGAT	ATCTCC	tilapia
99043:	99052	99062	99072	99082	99092	
	TGTGCCAGAG	AGGCAGTCAC	GACCCGGTCAG	CAGAGGTTCA	GGTGTCAGG	tilapia
99093:	99102	99112	99122	99132	99142	
	GAGACGACTG	ACTGACAAGG	CCGAGCGGGAC	CTCTACAGTCC	ATCCTG	tilapia
99143:	99152	99162	99172	99182	99192	
	ATTGGGCCTTT	TATCCTTCCT	TCCCTCCCTCT	CCCCGTCGCT	CCGCACCA	tilapia
186264:	AC...	CCT.....	T...T...TT	TT..C..T	----..C	Mouse
99193:	99202	99212	99222	99232	99242	
	TGACCCATCT	TTCCCTTCGTT	CAGACGCCACC	CTTCACTCTCC	CCCACT	tilapia
186307:	.CC..TCC.C	.C....C.CC	----.C.TC	...C....T..	TC..TTTA.	Mouse
99243:	99252	99259	99269	99279	99289	
	CACTCTCTACT	CA---CAGAAC	CCCCAGCCTG	TCACTCTCAT	CCTCCCC	tilapia
127498:				.C.....	CA.....TT	zebrafish_a
186354:	TT....T	.CT.T	ACCT..T...T	.T.AA.---	T.T..TTTT	Mouse

99290:	CCTTCCTTCTCCCCACTCACCTTCTTTTTACCCCTTTAGCTAAACATT	tilapia
127514:	.TCCT.A.T....TT..ATC.TCCT...C..CT.T..	zebrafish_a
186401:	.T...T....TT.TTT..TT.T.....C.TT.TTTC..	Mouse
99340:	ACCGCAGATTTTCACTCAGCAGGCCAGGCTGACTGGGGCAGCTCTCTGTG	tilapia
99390:	GGACTGCATTTGTCTTCAGTTCACCGACATGCATTACATTTCACACACAC	tilapia
117069:	ACA...AC...CA..CA....CA.....	zebrafish_a
92329:	..CA.....	zebrafish_b
188436:	..A....A...A.....CA....G....	Mouse
99440:	ATGCAGTCAC-TGCATATACAATGTTTGCACAGAGGTTTGCACAGGCAGA	tilapia
117105:	.CA..CA...ACA..C.C...-----C.CACACA....CA..C.	zebrafish_a
92348:	.CT..TA...-A.GG.C.	zebrafish_b
188464:	.CA...A...A...G.G.GTG-----GGGG..TA.A.A....A..TT	Mouse
99489:	CATACACGTAGGAAATGATACACAGTTTTTAAAGAAGTAAACAAATGAGC	tilapia
117148:	..C....AC.CAGT-----GG.....T..G.	zebrafish_a
188507:	GT..TGT.A.A.GTGA....-----G.T.....	Mouse
99539:	TCACACAAATACAACCTTGCACACGTGGAATGCCCAAGATGTTATAATT	tilapia
99589:	GTATAGTTAAAGTTAAGATGATCAAGAAATTAAATTGCACATTTCACTAT	tilapia
99639:	GTCACATTTACTTGTAGTTACCGCCACAGATTTTGTTTACAGTAATTTTG	tilapia
99689:	TGCTGTTGGACAGAAAGCCTTTGTTTTGTGAAGTTTAATTATATATAGAG	tilapia
99739:	CACTCATTTCTTCTTCTGATGCATCCATCACATTTTATATACAGGCCTC	tilapia
99789:	AGTGAGCTGGGATTTGAGCTACCATTTACGCTGTTTACGACTTTTTTCCAA	tilapia
99839:	ATTACAGCAAACGACCAAGATTAAACACTACATATCAAAAAAACTAAAAA	tilapia
99889:	TAGCTGACAAATTAAAGGAAAAGCCAATATGAAACACCTCACCAAGA	tilapia

Annotations legend

Underlays legend

