Supplemental_Table_S1. Sequence variants in wild-type BA clones

BA ID	Genomic position (hg19)	cDNA position (hg19)	Reference	Variant	db SNP ID	Variation	Minor Allele Frequency/Minor Allele Count
BA1	94579053	67-431	T	C	rs4147807	A/G	G = 0.212/1063
BA1	94579039	67-417	C	T	rs4147808	G/A	A = 0.206/1030
BA1	94578548	141	A	G	rs4847281	T/C	T=0.0130/65
BA1	94578317	160+212	G	T	rs7524869	C/A	A = 0.318/1595
BA1	94577462	161-327	C	A	rs3789438	G/T	T = 0.217/1085
BA1	94576968	302+26	A	G	rs2297634	T/A/C	T = 0.453/2269
BA1	94576893	302+101	C	T	rs2297635	G/A	A = 0.221/1108
BA1	94576664	302+330	T	C	rs4147810	A/G	G = 0.228/1144
BA1	94576524	302+470	C	G	rs3827713	G/C	G = 0.455/2278
BA1	94575978	302+1016	A	G	rs3789434	T/C	C = 0.22/1101
BA1	94575440	303-1168	T	C	rs3789433	A/G	A = 0.326/1635
BA1	94574915	303-643	G	A	rs4147814	C/T	C = 0.456/2286
BA1	94574718	303-446	–	AAGGAAGTAAAA	rs554474828	-/TTTTACTTCCTT	T=0.2238/1121
BA1	94574053	442+80	G	T	rs11165073	C/A	C = 0.457/2290
BA1	94573920	442+213	T	C	rs12093963	A/G	G = 0.224/1120
BA1	94573798	442+335	A	G	rs4847279	T/C	T =0.01/47
BA1	94573722	442+411	C	A	rs12057375	G/T	T = 0.222/1112
BA1	94572270	442+1863	G	C	rs1191236	C/G	C = 0.139/694
BA ID	**Genomic position (hg19)**	**cDNA position (hg19)**	**Reference**	**Variant**	**db SNP ID**	**Variation**	**Minor Allele Frequency/Minor Allele Count**
BA2	94576968	302+26	A	G	rs2297634	T/A/C	T = 0.453/2269
BA2	94576893	302+101	C	T	rs2297635	G/A	A = 0.221/1108
BA2	94576664	302+330	T	C	rs4147810	A/G	G = 0.228/1144
BA2	94575667	302+1327	C	T	n.a.	n.a.	n.a.
BA2	94575440	303-1168	T	C	rs3789433	A/G	A = 0.326/1635
BA2	94575107	303-835	G	A	n.a.	n.a.	n.a.
BA2	94575099	303-827	G	T	n.a.	n.a.	n.a.
BA2	94574718	303-446	–	AAGGAAGTAAAA	rs554474828	-/TTTTACTTCCTT	T=0.2238/1121
BA2	94574343	303-71	A	–	rs61753051	-/A	-=0.2841/1423
BA2	94574053	442+80	G	T	rs11165073	C/A	C = 0.457/2290

BA2	94573639	442+494	C	G	n.a.	n.a.	n.a.
BA2	94573624	442+509	–	A	n.a.	n.a.	n.a.
BA2	94573612	442+521	G	–	n.a.	n.a.	n.a.
BA2	94572928	442+1205	–	G	n.a.	n.a.	n.a.
BA2	94572901	442+1232	C	G	n.a.	n.a.	n.a.
BA2	94571065	443-2367	G	T	n.a.	n.a.	n.a.
BA2	94568822	443-124	A	G	rs2297636	T/C	C = 0.341/1709
BA2	94568104	570+467	C	T	rs525749	G/A	G < 0.01/10
BA ID	**Genomic position (hg19)**	**cDNA position (hg19)**	**Reference**	**Variant**	**db SNP ID**	**Variation**	**Minor Allele Frequency/Minor Allele Count**
BA3	94574718	303-446	–	AAGGAAGTAAAA	rs554474828	-/TTTTACTTCCTT	T=0.2238/1121
BA3	94574343	303-71	A	–	rs61753051	-/A	-=0.2841/1423
BA3	94574053	442+80	G	T	rs11165073	C/A	C = 0.457/2290
BA3	94573920	442+213	T	C	rs12093963	A/G	G = 0.224/1120
BA3	94573722	442+411	C	A	rs12057375	G/T	T = 0.222/1112
BA3	94569504	443-806	C	T	rs4147819	G/A	A = 0.127/635
BA3	94568822	443-124	A	G	rs2297636	T/C	C = 0.341/1709
BA ID	**Genomic position (hg19)**	**cDNA position (hg19)**	**Reference**	**Variant**	**db SNP ID**	**Variation**	**Minor Allele Frequency/Minor Allele Count**
BA4	94563916	768+434	A	G	rs12088309	T/C	C = 0.352/1764
BA4	94561489	768+2861	T	C	rs4147822	A/G	A = 0.429/2148
BA4	94560938	768+3412	C	T	rs4147825	G/A	A = 0.473/2369
BA4	94559133	768+5217	G	A	n.a.	n.a.	n.a.
BA4	94559096dup	768+5254dup	–	C	n.a.	n.a.	n.a.
BA4	94559064	768+5286	A	C	n.a.	n.a.	n.a.
BA ID	**Genomic position (hg19)**	**cDNA position (hg19)**	**Reference**	**Variant**	**db SNP ID**	**Variation**	**Minor Allele Frequency/Minor Allele Count**
BA5	94559144	768+5206	G	C	n.a.	n.a.	n.a.
BA5	94559140	768+5210	C	T	n.a.	n.a.	n.a.
BA5	94559139	768+5211	T	G	n.a.	n.a.	n.a.
BA5	94559136	768+5214	G	A	n.a.	n.a.	n.a.
BA5	94557499	768+6851	A	G	n.a.	n.a.	n.a.
BA5	94557498	768+6852	G	A	n.a.	n.a.	n.a.
BA5	94557480	768+6870	–	T	n.a.	n.a.	n.a.

BA ID	Genomic position (hg19)	cDNA position (hg19)	Reference	Variant	db SNP ID	Variation	Minor Allele Frequency/Minor Allele Count
BA6	94554307	769-5310	C	T	rs552283248	G/A	
BA6	94574343	303-71	–	A	rs61753051	-/A	0.284/404
BA6	94551408	769-2411	G	A	n.a.	n.a.	n.a.
BA6	94551391	769-2394	G	A	n.a.	n.a.	n.a.
BA6	94549102	769-105	G	A	n.a.	n.a.	n.a.
BA6	94549019	769-22	–	A	n.a.	n.a.	n.a.
BA ID	**Genomic position (hg19)**	**cDNA position (hg19)**	**Reference**	**Variant**	**db SNP ID**	**Variation**	**Minor Allele Frequency/Minor Allele Count**
BA7	94544807	1239+71	T	A	rs113931184	A/T	T = 0.016/80
BA ID	**Genomic position (hg19)**	**cDNA position (hg19)**	**Reference**	**Variant**	**db SNP ID**	**Variation**	**Minor Allele Frequency/Minor Allele Count**
BA8	94540430	1554+2816	G	A	n.a.	n.a.	n.a.
BA8	94540234	1554+3012	–	T	n.a.	n.a.	n.a.
BA8	94537977	1554+5269	A	–	rs1932015	T/C	T = 0.377/1886
BA8	94535960	1555-7087	G	T	n.a.	n.a.	n.a.
BA ID	**Genomic position (hg19)**	**cDNA position (hg19)**	**Reference**	**Variant**	**db SNP ID**	**Variation**	**Minor Allele Frequency/Minor Allele Count**
BA9	94538247	1554+4999	–	G	n.a.	n.a.	n.a.
BA9	94537977	1554+5269	A	G	rs1932015	T/C	T = 0.377/1886
BA9	94536755	1554+6491	–	A	n.a.	n.a.	n.a.
BA9	94534399	1555-5526	G	–	n.a.	n.a.	n.a.
BA ID	**Genomic position (hg19)**	**cDNA position (hg19)**	**Reference**	**Variant**	**db SNP ID**	**Variation**	**Minor Allele Frequency/Minor Allele Count**
BA10	94533813	1555-4940	G	A	n.a.	n.a.	n.a.
BA10	94533792	1555-4919	G	A	n.a.	n.a.	n.a.
BA10	94533616	1555-4743	A	–	n.a.	n.a.	n.a.
BA10	94533232	1555-4359	G	A	n.a.	n.a.	n.a.
BA10	94533218	1555-4345	G	A	n.a.	n.a.	n.a.
BA10	94533048	1555-4175	A		n.a.	n.a.	n.a.
BA10	94530090	1555-1217	T	G	n.a.	n.a.	n.a.
BA10	94530079	1555-1206	T	A	n.a.	n.a.	n.a.
BA10	94529494	1555-621	–	T	rs11322949	-/A	-=0.4040/2023
BA10	94527707	1937+426	A	–	n.a.	n.a.	n.a.

BA ID	Genomic position (hg19)	cDNA position (hg19)	Reference	Variant	db SNP ID	Variation	Minor Allele Frequency/Minor Allele Count
BA11							
BA ID	**Genomic position (hg19)**	**cDNA position (hg19)**	**Reference**	**Variant**	**db SNP ID**	**Variation**	**Minor Allele Frequency/Minor Allele Count**
BA12	94523259	2161-881	G	C	rs572064958	C/G	G < 0.01/1
BA12	94519329	2587+1337	A	–	rs558416489	-/T	-=0.0006/3
BA ID	**Genomic position (hg19)**	**cDNA position (hg19)**	**Reference**	**Variant**	**db SNP ID**	**Variation**	**Minor Allele Frequency/Minor Allele Count**
BA13	94519329	2587+1338	A	–	rs558416489	-/T	-=0.0006/3
BA13	94515646	2654-1133	G	A	n.a.	n.a.	n.a.
BA13	94513919	2743+505	C	–	n.a.	n.a.	n.a.
BA ID	**Genomic position (hg19)**	**cDNA position (hg19)**	**Reference**	**Variant**	**db SNP ID**	**Variation**	**Minor Allele Frequency/Minor Allele Count**
BA14	94512124	2918+351	T	C	rs4529714	A/G	A = 0.03/149
BA14	94511663	2918+812	T	C	n.a.	n.a.	n.a.
BA14	94511650	2918+825	G	T	rs867287955		
BA14	94511533	2918+942	C	T	rs3789398	G/A	G = 0.495/2479
BA14	94510807	2919-507	T	A	rs17110929	A/T	T = 0.216/1080
BA14	94510656	2919-356	C	G	n.a.	n.a.	n.a.
BA14	94510360	2919-60	C	A	rs568120374	G/T	T < 0.01/1
BA ID	**Genomic position (hg19)**	**cDNA position (hg19)**	**Reference**	**Variant**	**db SNP ID**	**Variation**	**Minor Allele Frequency/Minor Allele Count**
BA15	94512124	2918+351	T	C	rs4529714	A/G	A = 0.03/149
BA15	94511533	2918+942	C	T	rs3789398	G/A	G = 0.495/2479
BA15	94510807	2919-507	T	A	rs17110929	A/T	T = 0.216/1080
BA ID	**Genomic position (hg19)**	**cDNA position (hg19)**	**Reference**	**Variant**	**db SNP ID**	**Variation**	**Minor Allele Frequency/Minor Allele Count**
BA17	94503197	3608-291	T	G	rs1889548	A/C	A = 0.355/1780
BA17	94501799	3862+497	G	A	rs1320502	C/T	T = 0.377/1888
BA17	94501594	3862+702	T	G	rs3789395	A/C	C = 0.416/2085
BA ID	**Genomic position (hg19)**	**cDNA position (hg19)**	**Reference**	**Variant**	**db SNP ID**	**Variation**	**Minor Allele Frequency/Minor Allele Count**
BA18	94503197	3608-291	T	G	rs1889548	A/C	A = 0.355/1780
BA18	94501799	3862+497	G	A	rs1320502	C/T	T = 0.377/1888
BA18	94501594	3862+702	T	G	rs3789395	A/C	C = 0.416/2085

BA18	94500012	3862+2284	A	G	rs34541136	T/C	C = 0.457/2289
BA18	94499732	3863-2133	G	A	rs12070573	C/T	T = 0.447/2239
BA18	94498203	3863-604	C	T	rs11165068	G/A	A = 0.45/2253
BA18	94497178	4128+156	C	T	rs4147841	G/A	A = 0.485/2430
BA ID	**Genomic position (hg19)**	**cDNA position (hg19)**	**Reference**	**Variant**	**db SNP ID**	**Variation**	**Minor Allele Frequency/Minor Allele Count**
BA19	94501799	3862+497	G	A	rs1320502	C/T	T = 0.377/1888
BA19	94501594	3862+702	T	G	rs3789395	A/C	C = 0.416/2085
BA19	94500012	3862+2284	A	G	rs34541136	T/C	C = 0.457/2289
BA19	94499876	3863-2277	G	C	rs35561994	C/G	G = 0.42/2104
BA19	94499732	3863-2133	G	A	rs12070573	C/T	T = 0.447/2239
BA ID	**Genomic position (hg19)**	**cDNA position (hg19)**	**Reference**	**Variant**	**db SNP ID**	**Variation**	**Minor Allele Frequency/Minor Allele Count**
BA20	94497178	4128+156	C	T	rs4147841	G/A	A = 0.485/2430
BA20	94496253	4254-171	C	T	rs2297671	G/A/T	A = 0.391/1959
BA20	94495930	4352+54	A	G	rs547806	T/C	T = 0.012/59
BA20	94495816	4352+168	A	G	rs4147843	T/C	C = 0.493/2467
BA20	94495487	4353-300	C	T	rs4147844	G/A	A = 0.36/1801
BA20	94495417	4353-230	G	A	rs4147845	C/T	T = 0.357/1786
BA20	94495407	4353-220	G	A	rs4147846	C/T	T = 0.407/2039
BA20	94494487	4539+514	–	GTTT	rs35998587	–/CAAA	-/A/AA/AAAAAC/AAC/AC/C
BA20	94494231	4539+770	T	C	rs7547334	A/G	G = 0.493/2471
BA20	94494223	4539+778	A	C	rs945066	T/G	G = 0.493/2467
BA20	94492773	4540-2169	A	G	rs3945204	T/C	C = 0.492/2465
BA20	94491468	4540-864	C	T	rs11165065	G/A	A = 0.218/1094
BA20	94489975	4634+535	T	G	rs2151847	A/C	C = 0.471/2358
BA ID	**Genomic position (hg19)**	**cDNA position (hg19)**	**Reference**	**Variant**	**db SNP ID**	**Variation**	**Minor Allele Frequency/Minor Allele Count**
BA21	94495816	4352+168	A	G	rs4147843	T/C	C = 0.493/2467
BA21	94495487	4353-300	C	T	rs4147844	G/A	A = 0.36/1801
BA21	94495417	4353-230	G	A	rs4147845	C/T	T = 0.357/1786
BA21	94495407	4353-220	G	A	rs4147846	C/T	T = 0.407/2039
BA21	94492773	4540-2169	A	G	rs3945204	T/C	C = 0.492/2465
BA21	94491468	4540-864	C	T	rs11165065	G/A	A = 0.218/1094

BA21	94489975	4634+535	T	G	rs2151847	A/C	C = 0.471/2358
BA21	94489824del	4634+686del	G	–	n.a.	n.a.	n.a.
BA21	94489553	4635-579	C	A	rs1889407	G/T	T = 0.463/2318
BA ID	**Genomic position (hg19)**	**cDNA position (hg19)**	**Reference**	**Variant**	**db SNP ID**	**Variation**	**Minor Allele Frequency/Minor Allele Count**
BA22	94489975	4634+535	T	G	rs2151847	A/C	C = 0.471/2358
BA22	94489553	4635-579	C	A	rs1889407	G/T	T=0.4629/2318
BA22	94488497	4667+445	C	T	rs1932014	G/A	A = 0.465/2330
BA22	94488103	4668-596	A	G	rs12087777	T/C	C = 0.393/1967
BA22	94488032	4668-525	G	A	n.a.	n.a.	n.a.
BA ID	**Genomic position (hg19)**	**cDNA position (hg19)**	**Reference**	**Variant**	**db SNP ID**	**Variation**	**Minor Allele Frequency/Minor Allele Count**
BA23	94489553	4635-579	C	A	rs1889407	G/T	T = 0.463/2318
BA23	94488497	4667+445	C	T	rs1932014	G/A	A = 0.465/2330
BA23	94483765_ 94483766dup	5196+1372_ 5196+1373dup	–	GT	rs35639356	–/AC/CA	n.a.
BA ID	**Genomic position (hg19)**	**cDNA position (hg19)**	**Reference**	**Variant**	**db SNP ID**	**Variation**	**Minor Allele Frequency/Minor Allele Count**
BA24							
BA ID	**Genomic position (hg19)**	**cDNA position (hg19)**	**Reference**	**Variant**	**db SNP ID**	**Variation**	**Minor Allele Frequency/Minor Allele Count**
BA25	94480529	5313-283	T	G	rs3818778	A/C	C = 0.392/1962
BA25	94480439	5313-193	A	G	rs2275034	T/C	T = 0.49/2452
BA25	94480037	5460+62	G	A	rs2275033	C/T	T = 0.327/1638
BA25	94478969G>A	5460+1130C>T	C	T	n.a.	n.a.	n.a.
BA25	94478784	5460+1315	G	T	rs4147851	C/A	C = 0.42/2103
BA25	94478783	5460+1316	C	A	rs114831594	G/T	G = 0.42/2102
BA25	94478777	5460+1322	G	–	rs4147898	-/G	C=0.4197/2102
BA25	94478573	5460+1526	G	A	rs567370	C/T	C = 0.42/2101
BA25	94478562	5460+1537	C	G	rs487906	G/C	G = 0.105/527
BA25	94478425	5461-1484	G	A	rs486879	C/T	C = 0.297/1487
BA25	94477232	5461-291	A	C	rs565155	T/G	T = 0.095/478
BA25	94476555	5585-70	C	T	rs537831	G/A	G = 0.309/1545
BA ID	**Genomic position (hg19)**	**cDNA position (hg19)**	**Reference**	**Variant**	**db SNP ID**	**Variation**	**Minor Allele Frequency/Minor Allele Count**

BA26	94480529	5313-283	T	G	rs3818778	A/C	C = 0.392/1962
BA26	94480439	5313-193	A	G	rs2275034	T/C	T = 0.49/2452
BA26	94478969	5460+1130	C	T	n.a.	n.a.	n.a.
BA26	94478784	5460+1315	G	T	rs4147851	C/A	C = 0.42/2103
BA26	94478783	5460+1316	C	A	rs114831594	G/A/T	G = 0.42/2102
BA26	94478777	5460+1322	G	–	rs4147898	-/G	C=0.4197/2102
BA26	94478573	5460+1526	G	A	rs567370	C/T	C = 0.42/2101
BA26	94478562	5460+1537	C	G	rs487906	G/C	G = 0.105/527
BA26	94478425	5461-1484	G	A	rs486879	C/T	C = 0.297/1487
BA26	94477893	5461-952	A	G	rs945067	T/C	T = 0.287/1437
BA26	94477232	5461-291	A	C	rs565155	T/G	T = 0.095/478
BA26	94476555	5585-70	C	T	rs537831	G/A	G = 0.309/1545
BA26	94474020	5836-167	C	T	rs1191234	G/A	G = 0.109/545
BA ID	**Genomic position (hg19)**	**cDNA position (hg19)**	**Reference**	**Variant**	**db SNP ID**	**Variation**	**Minor Allele Frequency/Minor Allele Count**
BA27	94477232	5461-291	A	C	rs565155	T/G	T = 0.095/478
BA27	94476555	5585-70	C	T	rs537831	G/A	G = 0.309/1545
BA27	94474020	5836-167	C	T	rs1191234	G/A	G = 0.109/545
BA27	94472489	6005+701	A	G	rs557026	T/C	T = 0.11/550
BA27	94471075	6069	T	C	rs1762114	A/G	A = 0.23/1152
BA ID	**Genomic position (hg19)**	**cDNA position (hg19)**	**Reference**	**Variant**	**db SNP ID**	**Variation**	**Minor Allele Frequency/Minor Allele Count**
BA28							
BA ID	**Genomic position (hg19)**	**cDNA position (hg19)**	**Reference**	**Variant**	**db SNP ID**	**Variation**	**Minor Allele Frequency/Minor Allele Count**
BA29	94466817	6283-156	C	A	n.a.	n.a.	n.a.