

Supplementary Table 3. Peaks associated with ratios RER/WT 0.8-1.8

Gene	Peak Number	Gene Strand	Chr	WT_start	WT_end	RER_start	RER_end	WT_FC	RER_FC	FC_ratio (RER_FC - WT_FC)
Tm2d1	441	-	chr4	97856821	97856888	97856844	97856884	5.491853	5.169925	-0.321928
Mbp	1411	+	chr18	82658721	82658758	82658715	82658782	4.321928	4	-0.321928
Trp53	1416	+	chr11	69399378	69399456	69399416	69399488	4.321928	4	-0.321928
Dpf1	1423	+	chr7	30124402	30124431	30124345	30124529	4.321928	4	-0.321928
Optc	285	-	chr1	135792633	135792722	135792637	135792713	5.807355	5.491853	-0.315502
Htr4	1325	+	chr18	62445179	62445279	62445194	62445233	4.392317	4.087463	-0.304854
Runx1	140	-	chr16	92822429	92822526	92822415	92822501	6.266787	5.97728	-0.289507
Rab11a	927	-	chr9	64438433	64438505	64438454	64438532	4.807355	4.523562	-0.283793
Bcl2l11	1716	+	chr2	127910507	127910677	127910402	127910539	4.087463	3.807355	-0.280108
Hist1h2bg	1743	+	chr13	23663304	23663371	23663346	23663374	4.087463	3.807355	-0.280108
Trpm1	1790	+	chr7	71194289	71194352	71194286	71194314	4.087463	3.807355	-0.280108
Col5a1	1797	+	chr2	27837311	27837371	27837338	27837366	4.087463	3.807355	-0.280108
Slc44a2	1166	+	chr9	21156959	21157052	21156961	21157020	4.523562	4.247928	-0.275634
Stoml2	662	-	chr4	43050855	43050947	43050853	43050949	5.129283	4.857981	-0.271302
Btrc	1121	+	chr19	45519861	45519962	45519892	45519957	4.584963	4.321928	-0.263035
Tbc1d7	1287	-	chr13	43304634	43304698	43304644	43304672	4.169925	3.906891	-0.263034
Mtap	1613	+	chr4	88689905	88690021	88689942	88689970	4.169925	3.906891	-0.263034
Pcbp1	795	-	chr6	86459924	86459961	86459931	86459995	4.954196	4.70044	-0.253756
Ccdc32	1497	-	chr2	118850693	118850788	118850726	118850754	4.247928	4	-0.247928
Il1r1	1527	+	chr1	40287408	40287447	40287439	40287468	4.247928	4	-0.247928
St3gal2	346	+	chr8	113445561	113445649	113445580	113445664	5.672425	5.426265	-0.24616
Runx1	301	-	chr16	93147887	93147981	93147845	93147967	5.78136	5.554589	-0.226771
Rnf10	378	-	chr5	115717261	115717327	115717243	115717344	5.61471	5.392317	-0.222393
Lrrc47	808	+	chr4	153398143	153398279	153398154	153398250	4.906891	4.70044	-0.206451
Dopey2	630	+	chr16	93745186	93745376	93745186	93745215	4	3.807355	-0.192645
Hist1h2ao	1835	-	chr13	21925209	21925301	21925270	21925351	4	3.807355	-0.192645
Prim2	1853	-	chr1	33681868	33682003	33681920	33681948	4	3.807355	-0.192645
Vat1	1765	-	chr11	101324537	101324624	101324564	101324593	4.087463	3.906891	-0.180572
Timm9	1802	-	chr12	72265612	72265651	72265618	72265660	4.087463	3.906891	-0.180572
St3gal2	618	+	chr8	113453010	113453081	113452891	113453218	5.169925	5	-0.169925
Rdm1	1704	+	chr11	101503269	101503298	101503236	101503409	4.169925	4	-0.169925

Mpp2	852	-	chr11	101950514	101950600	101950479	101950563	4.857981	4.70044	-0.157541
Cyp2b10	1472	+	chr7	26683204	26683243	26683176	26683223	4.321928	4.169925	-0.152003
Ncoa7	1310	-	chr10	30483132	30483244	30483229	30483277	4.392317	4.247928	-0.144389
Snx3	671	+	chr10	42257507	42257604	42257495	42257571	5.087463	4.954196	-0.133267
Creg1	1153	+	chr1	167694294	167694379	167694278	167694359	4.523562	4.392317	-0.131245
Wdhd1	629	-	chr14	47860419	47860527	47860430	47860500	5.169925	5.044394	-0.125531
Crtam	633	-	chr9	40881766	40881883	40881818	40881846	5.169925	5.044394	-0.125531
Sdsl	1097	-	chr5	120915991	120916074	120916052	120916103	4.643856	4.523562	-0.120294
Ncoa4	780	+	chr14	32982188	32982290	32982197	32982270	4.954196	4.857981	-0.096215
Prokr1	1926	-	chr6	87540057	87540128	87540075	87540115	4	3.906891	-0.093109
H2afy3	1488	-	chr15	61990332	61990721	61990496	61990529	4.247928	4.169925	-0.078003
Hnrnpf	1503	+	chr6	117839002	117839062	117838994	117839040	4.247928	4.169925	-0.078003
Rab3c	1504	-	chr13	110473196	110473475	110473383	110473467	4.247928	4.169925	-0.078003
Mar-07	1394	-	chr18	57137545	57137599	57137542	57137656	4.321928	4.247928	-0.074
Auh	746	-	chr13	52926806	52926887	52926844	52926895	5	4.954196	-0.045804
Ssr1	296	-	chr13	38101949	38102042	38101967	38102053	5.78136	5.754888	-0.026472
Gnl2	557	+	chr4	124714901	124714951	124714855	124714964	5.285402	5.285402	0
Mmel1	827	+	chr4	154255088	154255178	154255096	154255187	4.906891	4.906891	0
Rgl1	872	-	chr1	154439886	154439962	154439890	154439929	4.857981	4.857981	0
Ap1b1	965	+	chr11	4867698	4867781	4867701	4867788	4.754888	4.754888	0
Cln8	1194	+	chr8	14890851	14890939	14890835	14890917	4.523562	4.523562	0
1110038D										
17Rik	1302	-	chr10	74978662	74978739	74978678	74978764	4.392317	4.392317	0
Ccdc63	1566	-	chr5	122586914	122586946	122586913	122586963	4.247928	4.247928	0
Dad1	1730	-	chr14	54824090	54824199	54824089	54824170	4.087463	4.087463	0
Hist2h3c1	1879	-	chr3	96042868	96042897	96042779	96042909	4	4	0
Pkd1l3	2056	+	chr8	112138535	112138584	112138480	112138509	3.906891	3.906891	0
Ucp3	2147	+	chr7	107611823	107611852	107611840	107611869	3.906891	3.906891	0
Tspan32	2193	+	chr7	150191345	150191422	150191396	150191424	3.807355	3.807355	0
1110020C										
03Rik	2231	-	chr4	118241457	118241498	118241530	118241558	3.807355	3.807355	0
Fam49a	652	+	chr12	12503420	12503489	12503417	12503503	5.129283	5.169925	0.040642
Kif26b	779	+	chr1	180642832	180642935	180642859	180642921	4.954196	5	0.045804

A630042L2										
1Rik	999	-	chr18	61314739	61314825	61314759	61314841	4.70044	4.754888	0.054448
B2m	1132	+	chr2	121963978	121964097	121963992	121964035	4.584963	4.643856	0.058893
Csf2ra	237	-	chr19	61342339	61342367	61342212	61342416	5.97728	6.044394	0.067114
Olfml2b	343	+	chr1	172553244	172553331	172553244	172553273	4.247928	4.321928	0.074
Mex3c	2066	+	chr18	73693001	73693220	73693108	73693220	3.906891	3.983566	0.076675
Hist1h3b	1789	+	chr13	23844334	23844411	23844342	23844371	4.087463	4.169925	0.082462
Pigc	1845	+	chr1	163824811	163824921	163824789	163824849	4	4.087463	0.087463
Hist1h2ao	2006	-	chr13	21902297	21902326	21902287	21902342	3.906891	4	0.093109
Klf11	2073	+	chr12	25329081	25329111	25329092	25329120	3.906891	4	0.093109
1700012L0										
4Rik	2203	+	chrX	8875810	8875854	8875879	8875931	3.807355	3.906891	0.099536
Tipin	2206	+	chr9	64129368	64129444	64129429	64129458	3.807355	3.906891	0.099536
Slc43a3	997	+	chr2	84778914	84779000	84778876	84778951	4.70044	4.807355	0.106915
Dsn1	2373	-	chr2	156853507	156853681	156853608	156853636	3.70044	3.807355	0.106915
Etaa1	404	-	chr11	17826155	17826184	17826109	17826319	5.548517	5.672425	0.123908
Eef1a1	1243	-	chr9	78364017	78364097	78363986	78364112	4.459432	4.584963	0.125531
Mxi1	1319	+	chr19	53400191	53400306	53400117	53400295	4.392317	4.523562	0.131245
Dnd1	1409	-	chr18	36932045	36932129	36932025	36932117	4.321928	4.459432	0.137504
Lrig1	987	-	chr6	94776879	94776907	94776745	94776945	4.754888	4.906891	0.152003
Chrac1	2003	+	chr15	72961875	72962179	72962033	72962061	3.906891	4.087463	0.180572
Exoc6	2033	+	chr19	37636177	37636264	37636155	37636232	3.906891	4.087463	0.180572
Nrap	2082	-	chr19	56466285	56466314	56466187	56466312	3.906891	4.087463	0.180572
Micall2	258	-	chr5	140214592	140214672	140214629	140214702	5.891795	6.087463	0.195668
Mapk9	1464	+	chr11	49686443	49686472	49686453	49686482	4.321928	4.523562	0.201634
Tsga10	2612	-	chr1	37801683	37801712	37801648	37801703	3.70044	3.906891	0.206451
Hist1h2bp	2947	+	chr13	21879546	21879669	21879498	21879526	3.584963	3.807355	0.222392
Sehl1	2985	+	chr18	67959614	67959643	67959634	67959662	3.584963	3.807355	0.222392
Meox2	1043	+	chr12	37543015	37543114	37542935	37543133	4.523562	4.754888	0.231326
Rpl31	1175	+	chr1	39450416	39450513	39450412	39450516	4.523562	4.754888	0.231326
Olfrr66	604	-	chr7	111019328	111019414	111019343	111019425	5.209453	5.459432	0.249979
Acsf5	2012	+	chr19	55358687	55358820	55358729	55358802	3.906891	4.169925	0.263034
Hlcs	1596	-	chr16	94372236	94372264	94372270	94372320	4.247928	4.523562	0.275634
Mrv1	694	-	chr7	118147792	118147825	118147785	118147851	5.044394	5.321928	0.277534

Tcfe2a	2166	-	chr10	79884590	79884683	79884632	79884713	3.807355	4.087463	0.280108
Rexo1	2529	-	chr10	80016441	80016476	80016442	80016472	3.70044	4	0.29956
Cntn3	1750	-	chr6	102506721	102506801	102506741	102506793	4.087463	4.392317	0.304854
Chn1	490	-	chr2	73656999	73657054	73656988	73657056	5.392317	5.70044	0.308123
Wbp4	2705	-	chr14	79933268	79933344	79933329	79933357	3.584963	3.906891	0.321928
Socs1	2751	-	chr16	10732085	10732142	10731960	10732077	3.584963	3.906891	0.321928
Cyp26c1	2783	+	chr19	37742832	37742887	37742845	37742874	3.584963	3.906891	0.321928
Alpk3	2853	+	chr7	88202836	88202987	88202882	88202937	3.584963	3.906891	0.321928
Usp40	236	-	chr1	89858207	89858294	89858203	89858282	5.97728	6.33985	0.36257
Calm2	2215	-	chr17	87846115	87846159	87846122	87846151	3.807355	4.169925	0.36257
Ryk	1778	+	chr9	102792527	102792597	102792525	102792618	4.087463	4.459432	0.371969
Tmhs	1806	+	chr17	28728554	28728616	28728536	28728598	4.087463	4.459432	0.371969
1110058L1										
9Rik	1813	-	chr1	23973194	23973258	23973188	23973261	4.087463	4.459432	0.371969
Fig4	1821	-	chr10	40916346	40916374	40916302	40916365	4.087463	4.459432	0.371969
Unc13d	1282	-	chr11	115938299	115938360	115938332	115938409	3.70044	4.087463	0.387023
Eif5	2408	+	chr12	112755210	112755265	112755258	112755314	3.70044	4.087463	0.387023
Etv6	1270	+	chr6	134139973	134140019	134139941	134140017	4.459432	4.857981	0.398549
Gins4	2043	-	chr8	24356625	24356674	24356562	24356635	3.906891	4.321928	0.415037
Zfand6	1633	-	chr7	91799897	91800003	91799910	91799994	4.169925	4.584963	0.415038
Hist2h3c1	2178	-	chr3	96050660	96050914	96050782	96050830	3.807355	4.247928	0.440573
Rpp21	841	-	chr17	36368164	36368460	36368152	36368180	4.857981	5.321928	0.463947
Nap1l4	2462	-	chr7	150751609	150751673	150751608	150751680	3.70044	4.169925	0.469485
Cpvl	2429	-	chr6	53930895	53930976	53930933	53931010	3.70044	4.247928	0.547488
Tmem123	1736	+	chr9	7790613	7790728	7790648	7790735	4.087463	4.643856	0.556393
St7	1611	+	chr6	17693463	17693583	17693455	17693595	4.169925	4.754888	0.584963
Kcnj2	1883	+	chr11	111549139	111549234	111549100	111549219	4	4.584963	0.584963
Atp6v1h	1588	+	chr1	5160658	5160707	5160602	5160805	4.247928	4.857981	0.610053
Rbp2	1719	+	chr9	98390094	98390277	98390156	98390225	4.087463	4.70044	0.612977
B3gnt2	733	-	chr11	22709977	22710044	22709979	22710058	5.044394	5.672425	0.628031
2610204M										
08Rik	2680	+	chr12	113837477	113837541	113837461	113837518	3.584963	4.247928	0.662965
Amigo2	1045	-	chr15	97210030	97210131	97210034	97210094	4.459432	5.129283	0.669851

9530002B0										
9Rik	2554	+	chr4	121871028	121871062	121870833	121871023	3.70044	4.392317	0.691877
Gp1ba	1846	+	chr11	70452458	70452565	70452506	70452571	4	4.70044	0.70044
Rnf11	1490	-	chr4	109118144	109118310	109118142	109118209	4.247928	4.954196	0.706268
B3gnt7	2701	+	chr1	88208982	88209049	88209009	88209058	3.584963	4.321928	0.736965
Rsbn1l	1626	-	chr5	20508587	20508663	20508606	20508679	4.169925	4.906891	0.736966
Stap2	1283	-	chr17	56145193	56145393	56145229	56145257	3.503716	4.247928	0.744212
Tsc22d1	2664	+	chr14	76969158	76969256	76969178	76969277	3.584963	4.40044	0.815437
Tmem158	1260	-	chr9	123184591	123184670	123184602	123184691	4.459432	5.285402	0.82597
Fthl17	18	+	chrX	8596687	8596897	8596687	8596891	3.774521	4.61268	0.838159
Sepn1	2640	-	chr4	134158040	134158069	134158048	134158094	2.956335	3.806952	0.850617
Rgnef	1988	-	chr13	98513495	98513524	98513459	98513550	4	4.887463	0.887463
Rnf125	1881	+	chr18	21097241	21097334	21097252	21097344	4	4.906891	0.906891

WT_start; WT_end; RER_start; RER_end: genomic coordinates of the peaks

WT_FC; RER_FC: peak height