

Supplementary Table 2

Chromosome	Start	End	Shift	Associated Gene	Feature
chr1	22560271	22560272	-80	Rims1	Genebody
chr1	21003791	21003792	-80	Tram2	Genebody
chr1	36760551	36760552	-80	Actr1b	Genebody
chr1	191986931	191986932	-80	Prox1	Genebody
chr1	43113831	43113832	-80	Tgfbrap1	Genebody
chr1	55769941	55769942	-80	Plcl1	Genebody
chr1	176827721	176827722	-80	Grem2	Genebody
chr1	85083781	85083782	-80	A530032D15Rik	Genebody
chr1	4344701	4344702	-80	Rp1	Genebody
chr1	23789061	23789062	-80	B3gat2	Genebody
chr1	85245161	85245162	-80	C130026I21Rik	Genebody
chr1	166056421	166056422	-80	Selp	Genebody
chr1	85258901	85258902	-80	C130026I21Rik	Genebody
chr1	169679011	169679012	-80	Lmx1a	Genebody
chr1	91575991	91575992	-80	4933400F21Rik	Genebody
chr1	6655921	6655922	-80	St18	Genebody
chr1	166003321	166003322	-80	Sell	Genebody
chr1	121510891	121510892	-80	Epb4.1I5	Genebody
chr1	45490271	45490272	-80	Col5a2	Genebody
chr1	60186791	60186792	-80	Carf	Genebody
chr1	182346911	182346912	-80	Itpkb	Genebody
chr1	129446701	129446702	-80	Tmem163	Genebody
chr1	194944261	194944262	-80	Diexf	Genebody
chr1	87477411	87477412	-80	Sp110	Genebody
chr1	152508091	152508092	-80	Hmcn1	Genebody
chr1	120755851	120755852	-80	Gli2	Genebody
chr1	87480861	87480862	-80	Sp110	Genebody
chr1	90137311	90137312	-80	Mroh2a	Genebody
chr1	87517551	87517552	-80	Sp140	Genebody
chr1	90139591	90139592	-80	Mroh2a	Genebody
chr1	122240731	122240732	-80	C1ql2	Genebody
chr1	127908061	127908062	-80	Nckap5	Genebody
chr1	53494651	53494652	-70	Dnahc7a	Genebody
chr1	169378081	169378082	-70	Lrrc52	Genebody
chr1	169382911	169382912	-70	Lrrc52	Genebody
chr1	11575571	11575572	-70	A830018L16Rik	Genebody
chr1	34147681	34147682	-70	Dst	Genebody
chr1	181440431	181440432	-70	Smyd3	Genebody
chr1	37320351	37320352	-70	Cnga3	Genebody
chr1	59350251	59350252	-70	Cdk15	Genebody
chr1	136967391	136967392	-70	Lgr6	Genebody
chr1	191736811	191736812	-70	Smyd2	Genebody
chr1	120768501	120768502	-70	Gli2	Genebody
chr1	152754011	152754012	-70	Hmcn1	Genebody
chr1	70597801	70597802	-70	Spag16	Genebody
chr1	20125921	20125922	-70	Pkhd1	Genebody