

Table S20: Protein coding genes in CNVs detected by JaxMDGA in 64 CD-1 mice. Genes overlapping with any of the detected CNVs are shown, not considering if an association with behavioral data was found. The first 5 columns show the gene symbol, gene ID (MGI) and the genomic position of genes. The last three columns include information on genomic position of CNVs the gene overlaps with. If genes are mentioned multiple times they overlap with more than one CNV. If CNVs appear more often, several genes were overlapping with them.

Symbol	MGI ID	Gene			CNV		
		Chr	Start	End	Chr	Start	End
Pkhd1	2155808	1	20,047,860	20,608,145	1	20,549,514	20,552,454
Ogfrl1	1917405	1	23,373,263	23,390,014	1	23,385,680	23,385,855
Zap70	99613	1	36,818,706	36,839,661	1	36,837,694	36,838,290
Cdk15	3583944	1	59,313,750	59,409,837	1	59,336,832	59,337,495
Mreg	2151839	1	72,206,020	72,258,881	1	72,198,891	72,210,724
D2hgdh	2138209	1	95,721,817	95,748,925	1	95,748,149	95,795,140
Gal3st2	2685834	1	95,757,921	95,773,071	1	95,748,149	95,795,140
Dpp10	2442409	1	125,228,719	125,942,136	1	125,564,862	125,583,245
Zp3r	104965	1	132,473,290	132,526,198	1	132,430,355	132,474,622
Ren1	97898	1	135,247,087	135,256,902	1	135,250,842	135,255,585
Gm4788	3646434	1	141,594,672	141,677,745	1	141,633,508	141,686,866
Uchl5	1914848	1	145,624,465	145,653,945	1	145,624,593	145,649,348
Ptgs2	97798	1	151,947,254	151,955,140	1	151,948,823	151,949,622
Hmcn1	2685047	1	152,409,654	152,840,565	1	152,551,280	152,551,619
Npl	1921341	1	155,350,146	155,396,844	1	155,362,668	155,395,168
Fam5b	2443333	1	160,175,397	160,286,393	1	159,719,419	160,644,184
Astn1	1098567	1	160,292,487	160,621,917	1	159,719,419	160,644,184
Pappa2	3051647	1	160,641,862	160,887,870	1	159,719,419	160,644,184
Pappa2	3051647	1	160,641,862	160,887,870	1	160,802,986	161,749,651
1600012P17Rik	1919275	1	160,888,258	160,910,621	1	160,802,986	161,749,651
4930562F17Rik	1922506	1	161,065,528	161,096,518	1	160,802,986	161,749,651
Rfwd2	1347046	1	161,162,457	161,277,711	1	160,802,986	161,749,651
Gm10530	3641765	1	161,544,880	161,615,006	1	160,802,986	161,749,651
Tnr	99516	1	161,667,641	161,854,606	1	160,802,986	161,749,651
Ndufs2	2385112	1	173,164,984	173,177,253	1	173,168,430	173,168,911
Ufc1	1913405	1	173,218,694	173,225,155	1	173,219,128	173,222,721
Gm7897	3648011	1	175,754,707	175,760,157	1	175,732,220	175,912,848
Mndal	3780953	1	175,779,241	175,810,289	1	175,732,220	175,912,848
Mnda	3041120	1	175,826,486	175,843,053	1	175,732,220	175,912,848
Ifi203	96428	1	175,850,538	175,872,803	1	175,732,220	175,912,848
Ifi202b	1347083	1	175,892,706	175,912,872	1	175,732,220	175,912,848
Ifi205	101847	1	175,942,129	175,961,886	1	175,956,768	175,956,788
Wdr64	1923070	1	177,628,724	177,745,497	1	177,725,275	177,729,816
Pld5	2442056	1	177,892,437	178,205,443	1	177,998,116	178,000,769
Nvl	1914709	1	183,023,554	183,074,288	1	183,060,113	183,072,518
Kcnk2	109366	1	191,031,812	191,167,711	1	191,042,126	191,079,146
Itih2	96619	2	10,016,220	10,053,023	2	10,026,781	10,026,809
St8sia6	2386797	2	13,572,647	13,715,435	2	13,664,146	13,664,834
Arl5b	1923119	2	14,971,022	15,004,083	2	14,998,525	15,246,657
Armc3	1918132	2	19,120,929	19,231,868	2	19,097,545	19,120,990
Il1f9	2449929	2	24,041,996	24,049,088	2	24,048,126	24,054,617
Cacna1b	88296	2	24,459,407	24,618,672	2	24,535,423	24,654,597
Ehmt1	1924933	2	24,646,289	24,775,129	2	24,535,423	24,654,597
Scai	2443716	2	38,921,734	39,046,250	2	38,974,768	38,976,716
Mbd5	2138934	2	48,805,030	49,177,804	2	49,051,169	49,070,497
Gca	1918521	2	62,502,342	62,532,166	2	62,524,035	62,524,468
Slc38a11	2443383	2	65,154,487	65,202,091	2	65,188,132	65,192,936
Itga6	96605	2	71,583,673	71,696,473	2	71,656,510	71,687,549
Zfp385b	2444734	2	77,248,691	77,657,696	2	77,654,621	77,675,641
Cwc22	2136773	2	77,719,216	77,784,432	2	77,675,871	77,873,766

Symbol	MGI ID	Gene			CNV		
		Chr	Start	End	Chr	Start	End
Fam171b	2444579	2	83,652,793	83,723,643	2	83,693,539	83,697,762
Olfr1031	3030865	2	85,831,976	85,832,986	2	85,832,974	85,867,734
Olfr1032	3030866	2	85,847,935	85,848,867	2	85,832,974	85,867,734
Gm3651	3781827	2	85,859,389	85,860,655	2	85,832,974	85,867,734
Olfr1202	3031036	2	88,657,330	88,658,259	2	88,639,234	88,671,005
Olfr1247	3031081	2	89,449,313	89,454,179	2	89,450,021	89,457,958
Olfr1248	3031082	2	89,457,424	89,458,347	2	89,450,021	89,457,958
Olfr1258	3031092	2	89,767,476	89,770,903	2	89,760,829	89,783,357
Olfr1259	3031093	2	89,783,341	89,784,270	2	89,760,829	89,783,357
Olfr140	2177523	2	89,891,571	89,903,751	2	89,902,828	89,923,597
Mtch2	1929260	2	90,687,312	90,706,967	2	90,687,682	90,704,935
Gm10801	3641656	2	98,502,394	98,504,240	2	98,502,651	98,504,185
B230118H07Rik	1915420	2	101,400,938	101,489,689	2	101,400,951	101,406,561
Ccdc73	3606488	2	104,707,962	104,858,061	2	104,754,730	104,755,713
Gm4300	3782480	2	114,630,072	114,766,408	2	114,646,550	114,812,772
Oip5	1917895	2	119,435,248	119,444,205	2	119,435,715	119,443,644
Slc12a1	103150	2	124,978,241	125,055,738	2	125,053,391	125,067,750
Fbln7	1917620	2	128,688,717	128,722,770	2	128,720,236	128,721,154
MacroD2	1920149	2	140,221,045	142,218,702	2	141,299,494	141,324,822
Slc24a3	2137513	2	144,993,490	145,467,902	2	145,449,366	145,461,121
Gm1330	2686176	2	148,816,079	148,828,987	2	148,755,144	148,927,143
Gm10750	3641996	2	148,841,664	148,842,065	2	148,755,144	148,927,143
Ninl	1925427	2	150,760,255	150,865,118	2	150,863,347	151,038,740
Nanp	1914561	2	150,855,421	150,865,134	2	150,863,347	151,038,740
Gm14151	3651016	2	150,912,522	150,918,086	2	150,863,347	151,038,740
Gm14147	3651555	2	150,923,981	150,929,554	2	150,863,347	151,038,740
Gm14149	3651549	2	151,030,931	151,057,350	2	150,863,347	151,038,740
Pdrg1	1915809	2	152,834,626	152,841,163	2	152,838,130	152,838,140
Rpn2	98085	2	157,104,753	157,152,055	2	157,151,875	157,154,538
Lbp	1098776	2	158,132,229	158,158,588	2	158,150,954	158,151,984
Dhx35	1918965	2	158,620,543	158,683,950	2	158,641,258	158,643,203
Ptptr	1321152	2	161,347,726	162,486,883	2	161,562,255	161,562,577
Gm14393	3649576	2	174,887,050	174,893,282	2	174,886,491	177,803,022
Gm14399	3650082	2	174,954,994	174,967,513	2	174,886,491	177,803,022
Gm14443	3652324	2	174,991,756	175,001,372	2	174,886,491	177,803,022
Gm14391	3709324	2	175,016,566	175,032,418	2	174,886,491	177,803,022
Gm14440	3702430	2	175,100,626	175,112,306	2	174,886,491	177,803,022
Gm4631	3782813	2	175,147,456	175,163,698	2	174,886,491	177,803,022
Gm4723	3782903	2	175,197,937	175,209,702	2	174,886,491	177,803,022
Gm4724	3782904	2	175,247,801	175,261,308	2	174,886,491	177,803,022
Gm8923	3779822	2	175,295,564	175,307,672	2	174,886,491	177,803,022
Gm11009	3779227	2	175,375,252	175,377,087	2	174,886,491	177,803,022
2210418O10Rik	1924208	2	175,454,411	175,468,170	2	174,886,491	177,803,022
Gm2004	3780174	2	175,544,914	175,553,148	2	174,886,491	177,803,022
Gm11008	3779224	2	175,594,033	175,605,283	2	174,886,491	177,803,022
Gm11007	3779223	2	175,643,110	175,652,992	2	174,886,491	177,803,022
Gm4245	3782422	2	175,692,089	175,702,778	2	174,886,491	177,803,022
Gm2007	3780177	2	175,740,669	175,750,551	2	174,886,491	177,803,022
Gm14288	3706570	2	175,788,489	175,800,225	2	174,886,491	177,803,022
Gm6710	3779623	2	175,868,351	175,880,380	2	174,886,491	177,803,022

Symbol	MGI ID	Gene			CNV		
		Chr	Start	End	Chr	Start	End
Gm8898	3709288	2	175,918,013	175,930,232	2	174,886,491	177,803,022
Gm2026	3780195	2	175,964,463	175,977,956	2	174,886,491	177,803,022
Gm14432	3702415	2	176,083,705	176,093,584	2	174,886,491	177,803,022
Gm14436	3702427	2	176,131,382	176,141,650	2	174,886,491	177,803,022
Gm14430	3702412	2	176,181,277	176,191,160	2	174,886,491	177,803,022
Gm14431	3709638	2	176,221,773	176,232,462	2	174,886,491	177,803,022
Gm14434	3702417	2	176,266,735	176,280,240	2	174,886,491	177,803,022
Gm14435	3702420	2	176,317,757	176,329,924	2	174,886,491	177,803,022
Gm2049	3780217	2	176,386,900	176,388,685	2	174,886,491	177,803,022
Gm14308	3782921	2	176,398,073	176,421,053	2	174,886,491	177,803,022
Gm14306	3805542	2	176,455,231	176,503,794	2	174,886,491	177,803,022
Gm14305	3709632	2	176,493,037	176,506,522	2	174,886,491	177,803,022
Gm14295	3709624	2	176,583,317	176,595,928	2	174,886,491	177,803,022
Gm14408	3651910	2	176,615,845	176,621,435	2	174,886,491	177,803,022
Gm14419	3702410	2	176,785,661	176,797,492	2	174,886,491	177,803,022
Gm14401	3650075	2	176,859,025	176,872,052	2	174,886,491	177,803,022
Gm14410	3709158	2	176,968,158	176,991,126	2	174,886,491	177,803,022
Gm4418	3782603	2	177,036,548	177,038,248	2	174,886,491	177,803,022
Gm14409	3649811	2	177,049,359	177,051,741	2	174,886,491	177,803,022
Gm14412	3652251	2	177,099,225	177,109,012	2	174,886,491	177,803,022
Gm14418	3702408	2	177,171,829	177,183,025	2	174,886,491	177,803,022
Gm14420	3652255	2	177,249,438	177,262,834	2	174,886,491	177,803,022
Gm14403	3649813	2	177,282,920	177,294,176	2	174,886,491	177,803,022
Gm14406	3649838	2	177,353,909	177,362,915	2	174,886,491	177,803,022
Gm14322	3652185	2	177,493,993	177,505,177	2	174,886,491	177,803,022
Gm14325	3702875	2	177,566,496	177,575,041	2	174,886,491	177,803,022
Gm14327	3652188	2	177,631,801	177,640,489	2	174,886,491	177,803,022
C330013J21Rik	1925953	2	177,638,045	177,660,318	2	174,886,491	177,803,022
Gm14326	3709298	2	177,670,698	177,692,002	2	174,886,491	177,803,022
Etohi1	1261426	2	177,757,989	177,768,727	2	174,886,491	177,803,022
2810021G02Rik	2441662	2	177,802,400	177,813,181	2	174,886,491	177,803,022
Gm7645	3646877	2	181,022,488	181,035,063	2	181,026,765	181,027,369
Pkia	104747	3	7,366,604	7,445,366	3	7,421,882	7,421,985
Stmn2	98241	3	8,509,527	8,561,604	3	8,555,413	8,556,638
Chmp4c	1913621	3	10,366,907	10,391,005	3	10,385,565	10,390,978
Sirpb1a	2444824	3	15,371,819	15,426,504	3	15,340,258	15,819,607
Sirpb1b	3779828	3	15,495,754	15,575,065	3	15,340,258	15,819,607
Sirpb1c	3807521	3	15,695,145	15,748,528	3	15,340,258	15,819,607
Cp	88476	3	19,857,054	19,909,145	3	19,908,299	19,908,553
Hps3	2153839	3	19,895,945	19,935,315	3	19,908,299	19,908,553
Naaladl2	2685867	3	23,703,838	24,682,465	3	24,116,353	24,157,241
Nceh1	2443191	3	27,081,887	27,183,530	3	27,091,227	27,091,625
4932438A13Rik	2444631	3	36,762,043	36,951,955	3	36,939,970	36,945,279
Gm6098	3779552	3	74,046,186	74,047,168	3	73,914,056	74,346,968
Serpini1	1194506	3	75,361,469	75,447,417	3	75,378,209	75,414,973
Golim4	1920374	3	75,680,105	75,760,871	3	75,701,773	75,712,088
Fstl5	2442179	3	75,878,192	76,513,941	3	75,822,052	75,927,523
Rxfp1	2682211	3	79,448,638	79,541,716	3	79,517,672	79,541,183
Glrbl	95751	3	80,647,521	80,717,582	3	80,664,095	80,665,695
Ctso	2139628	3	81,736,523	81,760,647	3	81,739,495	81,746,183

Symbol	MGI ID	Gene			Chr	CNV	
		Chr	Start	End		Start	End
Fgg	95526	3	82,811,818	82,818,969	3	82,811,832	82,812,650
Pglyrp3	2685266	3	91,818,505	91,835,504	3	91,831,940	91,835,321
Tdpoz4	3027904	3	93,600,320	93,601,432	3	93,569,096	94,040,272
Tdpoz3	3027903	3	93,629,942	93,631,039	3	93,569,096	94,040,272
Tdpoz5	3027905	3	93,764,214	93,765,236	3	93,569,096	94,040,272
Gm9125	3702970	3	93,852,944	93,854,041	3	93,569,096	94,040,272
Gm10697	3710527	3	93,875,544	93,876,566	3	93,569,096	94,040,272
Gm10696	3702972	3	93,978,334	93,982,115	3	93,569,096	94,040,272
Gm5286	3644284	3	94,000,636	94,003,724	3	93,569,096	94,040,272
Sycp1	105931	3	102,622,573	102,740,007	3	102,697,496	102,739,985
Syt6	1859544	3	103,379,154	103,449,490	3	103,421,855	103,422,775
Cdc14a	2442676	3	115,975,471	116,126,950	3	116,043,731	116,044,155
Arhgap29	2443818	3	121,656,147	121,719,595	3	121,705,472	121,715,079
Myoz2	1913063	3	122,709,124	122,737,908	3	122,728,997	122,729,137
Ppa2	1922026	3	132,973,074	133,041,199	3	133,030,667	133,030,900
Slc39a8	1914797	3	135,488,243	135,551,532	3	135,520,542	135,537,289
Emcn	1891716	3	137,004,031	137,095,149	3	137,032,543	137,036,277
H2afz	1888388	3	137,527,451	137,529,884	3	137,487,798	137,529,819
Unc5c	1095412	3	141,128,528	141,497,888	3	141,381,217	141,384,341
Bmpr1b	107191	3	141,500,100	141,832,389	3	141,728,366	141,728,691
Tmem68	1919348	4	3,476,188	3,502,000	4	3,458,919	3,479,026
Cngeb3	1353562	4	19,207,997	19,437,770	4	19,295,055	19,299,440
Palm2-Akap2	3845895	4	57,581,051	57,909,854	4	57,769,227	57,769,969
Akap2	1306795	4	57,754,967	57,909,854	4	57,769,227	57,769,969
Ptprd	97812	4	75,587,143	77,857,865	4	77,028,168	77,043,306
Ptprd	97812	4	75,587,143	77,857,865	4	77,228,417	77,255,056
Tm2d1	2137022	4	98,022,061	98,049,997	4	98,039,179	98,039,527
Pgm2	97565	4	99,602,019	99,659,899	4	99,656,586	99,659,910
Rab3b	1917158	4	108,551,668	108,615,929	4	108,610,948	108,611,085
Skint4	2444425	4	111,744,621	111,840,681	4	111,745,396	112,286,229
Skint3	3045331	4	111,904,850	111,973,073	4	111,745,396	112,286,229
Skint9	3045341	4	112,058,574	112,106,590	4	111,745,396	112,286,229
Skint2	3649629	4	112,286,202	112,320,445	4	111,745,396	112,286,229
Skint10	2685416	4	112,383,752	112,447,471	4	112,348,832	113,968,233
Skint6	3649262	4	112,908,844	112,959,568	4	112,348,832	113,968,233
Skint5	3650151	4	113,613,249	113,672,102	4	112,348,832	113,968,233
Skint11	2685415	4	113,835,989	113,917,633	4	112,348,832	113,968,233
Gm10573	3649909	4	121,654,799	121,668,854	4	121,651,872	122,237,050
Gm13083	3650232	4	143,204,906	143,208,498	4	143,201,660	143,205,948
Gm13109	3649968	4	143,538,483	143,540,919	4	143,539,831	143,555,553
Gm13101	3650204	4	143,554,421	143,556,853	4	143,539,831	143,555,553
Gm13235	3649925	4	145,458,697	145,489,878	4	145,452,418	146,034,593
Gm13248	3713585	4	145,539,879	145,587,078	4	145,452,418	146,034,593
Gm13247	3700965	4	145,658,647	145,696,012	4	145,452,418	146,034,593
2610036A22Rik	1917440	4	145,729,798	145,765,642	4	145,452,418	146,034,593
Gm13251	3700963	4	145,729,798	145,749,009	4	145,452,418	146,034,593
Rex2	1328322	4	145,881,260	145,889,548	4	145,452,418	146,034,593
Gm7026	3779649	4	145,942,681	145,954,578	4	145,452,418	146,034,593
Gm13154	3651986	4	146,927,386	146,959,307	4	146,941,153	147,202,567
2610305D13Rik	2148252	4	146,986,046	147,016,622	4	146,941,153	147,202,567

Symbol	MGI ID	Gene			CNV		
		Chr	Start	End	Chr	Start	End
Zfp534	3650650	4	147,047,611	147,076,662	4	146,941,153	147,202,567
Gm13157	3651978	4	147,128,308	147,149,942	4	146,941,153	147,202,567
2810408P10Rik	1922865	4	147,197,095	147,222,475	4	146,941,153	147,202,567
9430015G10Rik	2444364	4	155,484,091	155,501,374	4	155,497,765	155,507,226
Gm8591	3646803	4	155,503,367	155,512,909	4	155,497,765	155,507,226
Cdk6	1277162	5	3,344,312	3,522,225	5	3,499,602	3,519,482
Mterf	1918240	5	3,890,581	3,893,933	5	3,884,799	3,922,844
Cdk14	894318	5	4,803,391	5,380,251	5	4,844,004	4,869,796
Cdk14	894318	5	4,803,391	5,380,251	5	5,129,103	5,135,345
Gtpbp10	2385599	5	5,537,454	5,559,538	5	5,538,674	5,547,973
A330021E22Rik	2443778	5	5,579,278	5,664,239	5	5,584,666	5,584,972
Gm4047	3782222	5	11,190,195	11,222,015	5	10,785,521	11,246,794
GalntI5	1915159	5	24,687,278	24,726,115	5	24,721,251	24,722,132
Galnt11	2444392	5	24,728,700	24,771,736	5	24,735,376	24,752,262
Jakmip1	1923321	5	37,438,671	37,539,255	5	37,404,544	37,441,150
Rbpj	96522	5	53,947,018	54,048,684	5	54,011,829	54,052,518
Tmem156	2685292	5	65,456,368	65,482,794	5	65,457,666	65,458,442
Corin	1349451	5	72,691,265	72,895,447	5	72,864,953	72,887,910
Dcun1d4	2140972	5	73,872,241	73,952,033	5	73,849,774	73,880,229
Epha5	99654	5	84,486,816	84,846,407	5	84,551,530	84,563,500
5830473C10Rik	1923342	5	90,990,244	91,008,734	5	91,008,627	91,008,703
Shroom3	1351655	5	93,112,461	93,394,785	5	93,157,395	93,174,537
Gm7792	3704104	5	94,281,097	94,284,656	5	94,161,655	96,262,456
Gm16429	3704105	5	94,353,803	94,358,078	5	94,161,655	96,262,456
Gm6346	3644199	5	94,365,781	94,368,514	5	94,161,655	96,262,456
BC061212	2681870	5	94,495,177	94,499,571	5	94,161,655	96,262,456
Gm6351	3647817	5	94,505,411	94,510,023	5	94,161,655	96,262,456
Gm3106	3781282	5	94,647,020	94,650,562	5	94,161,655	96,262,456
Gm16522	4360987	5	94,731,544	94,735,821	5	94,161,655	96,262,456
Gm6502	3779601	5	94,743,494	94,746,227	5	94,161,655	96,262,456
AA792892	2140789	5	94,810,361	94,814,104	5	94,161,655	96,262,456
Gm7682	3779756	5	94,874,843	94,877,576	5	94,161,655	96,262,456
Gm3139	3781318	5	94,955,309	94,968,473	5	94,161,655	96,262,456
Gm3147	3781326	5	95,041,094	95,045,367	5	94,161,655	96,262,456
Gm6509	3779602	5	95,053,038	95,055,771	5	94,161,655	96,262,456
Gm6523	3779604	5	95,206,896	95,210,006	5	94,161,655	96,262,456
Gm3183	3781362	5	95,294,521	95,307,501	5	94,161,655	96,262,456
Gm7942	3646599	5	95,537,068	95,540,177	5	94,161,655	96,262,456
Gm16513	2141041	5	95,611,623	95,624,586	5	94,161,655	96,262,456
Gm10424	3704250	5	95,697,512	95,701,787	5	94,161,655	96,262,456
Gm6468	3646666	5	95,709,481	95,711,989	5	94,161,655	96,262,456
Gm3259	3781437	5	95,734,834	95,772,936	5	94,161,655	96,262,456
Gm7963	3643214	5	95,854,546	95,857,656	5	94,161,655	96,262,456
D5Ertd577e	1261918	5	95,885,825	95,914,583	5	94,161,655	96,262,456
Gm3286	3781464	5	95,947,694	95,950,987	5	94,161,655	96,262,456
Gm7971	3779772	5	96,019,618	96,023,894	5	94,161,655	96,262,456
Gm6348	3643967	5	96,031,597	96,034,330	5	94,161,655	96,262,456
Gm7978	3704107	5	96,160,857	96,165,192	5	94,161,655	96,262,456
Gm7982	3648891	5	96,171,033	96,175,636	5	94,161,655	96,262,456
E330014E10Rik	3615333	5	96,204,889	96,233,734	5	94,161,655	96,262,456

Symbol	MGI ID	Gene			Chr	CNV	
		Chr	Start	End		Start	End
C230055K05Rik	2441896	5	105,242,188	105,288,830	5	105,034,912	105,359,320
Gbp9	3605620	5	105,508,317	105,539,297	5	105,511,760	105,511,768
Pde6b	97525	5	108,817,410	108,861,416	5	108,854,265	108,854,385
Gm10417	3642677	5	109,293,852	109,297,373	5	109,297,277	109,405,615
Gm3432	3781610	5	109,323,598	109,390,640	5	109,297,277	109,405,615
Sez6l	1935121	5	112,848,180	113,006,205	5	112,964,873	112,965,257
Ccdc60	2141043	5	116,574,650	116,738,994	5	116,694,063	116,703,656
Nos1	97360	5	118,231,041	118,408,849	5	118,388,158	118,390,795
1700123K08Rik	1923908	5	139,003,068	139,005,922	5	139,004,112	139,005,838
Flt1	95558	5	148,373,180	148,537,587	5	148,493,203	148,495,504
Col28a1	2685312	6	7,947,808	8,142,617	6	8,041,854	8,049,012
Cadps2	2443963	6	23,212,773	23,789,420	6	23,304,438	23,304,526
Slc13a1	1859937	6	24,038,295	24,118,092	6	24,062,606	24,063,639
Cntnap2	1914047	6	45,010,060	47,251,368	6	45,499,299	45,520,306
Il23r	2181693	6	67,372,926	67,441,849	6	67,402,363	67,416,752
Gm4966	3646892	6	67,892,070	67,892,534	6	67,876,359	68,253,141
Gm5571	3647784	6	67,999,977	68,000,448	6	67,876,359	68,253,141
Gm16797	4439721	6	68,071,085	68,071,821	6	67,876,359	68,253,141
Gm16939	4439863	6	68,206,398	68,206,863	6	67,876,359	68,253,141
Gm16637	4439561	6	68,581,957	68,582,424	6	68,535,332	68,785,029
Gm10879	3642277	6	68,718,549	68,719,097	6	68,535,332	68,785,029
Gm10880	3779447	6	69,134,820	69,135,355	6	69,017,899	69,193,441
Gm1499	2686345	6	69,176,848	69,177,377	6	69,017,899	69,193,441
Gm11143	3809111	6	69,548,902	69,567,418	6	69,452,717	69,650,773
Gm1524	2686370	6	69,557,269	69,557,795	6	69,452,717	69,650,773
Gm16852	4439776	6	69,631,400	69,631,933	6	69,452,717	69,650,773
Gm11142	3779397	6	69,643,493	69,645,302	6	69,452,717	69,650,773
Pole4	1914229	6	82,568,986	82,655,359	6	82,601,443	82,602,661
Magi1	1203522	6	93,628,030	94,233,316	6	93,784,886	93,785,383
Frmd4b	2141794	6	97,236,861	97,567,535	6	97,429,680	97,475,425
Gm7865	3779768	6	98,457,720	98,647,619	6	98,496,702	98,523,715
Pdzrn3	1933157	6	101,099,603	101,327,891	6	101,279,285	101,286,899
Cntn3	99534	6	102,113,300	102,414,661	6	102,304,927	102,326,421
Chl1	1098266	6	103,460,870	103,683,029	6	103,383,705	103,460,909
Cntn6	1858223	6	104,442,784	104,813,400	6	104,527,703	104,528,363
D6Wsu116e	106463	6	116,158,075	116,212,683	6	116,198,049	116,199,740
Tead4	106907	6	128,174,306	128,250,841	6	128,202,481	128,204,309
Gm4697	3782877	6	128,728,503	128,730,111	6	128,729,176	128,769,001
Klrb1c	107538	6	128,728,507	128,738,598	6	128,729,176	128,769,001
Klrb1b	107539	6	128,763,724	128,776,317	6	128,729,176	128,769,001
Klra8	102968	6	130,065,244	130,079,916	6	130,065,363	130,316,515
Gm11082	3779313	6	130,090,299	130,093,709	6	130,065,363	130,316,515
Klra14	1321089	6	130,099,124	130,110,766	6	130,065,363	130,316,515
Klra9	1321153	6	130,128,771	130,143,130	6	130,065,363	130,316,515
Gm11081	3779312	6	130,131,767	130,134,749	6	130,065,363	130,316,515
Klra7	101901	6	130,168,623	130,183,340	6	130,065,363	130,316,515
Klra12	1321091	6	130,216,427	130,259,519	6	130,065,363	130,316,515
Klra10	1321093	6	130,219,212	130,231,946	6	130,065,363	130,316,515
Klra23	1930932	6	130,241,179	130,258,379	6	130,065,363	130,316,515
Gm11080	3779311	6	130,265,549	130,265,862	6	130,065,363	130,316,515

Symbol	MGI ID	Gene			CNV		
		Chr	Start	End	Chr	Start	End
Klra3	101905	6	130,273,307	130,287,592	6	130,065,363	130,316,515
Klra1	101907	6	130,313,936	130,336,892	6	130,065,363	130,316,515
Gm6601	3779613	6	130,738,055	130,750,786	6	130,707,413	130,787,067
Gm7193	3648824	6	130,750,918	130,838,803	6	130,707,413	130,787,067
Slc15a5	3607714	6	137,932,107	138,021,717	6	137,984,036	137,984,036
Lmo3	102810	6	138,311,439	138,530,489	6	138,345,026	138,345,242
Pik3c2g	1203730	6	139,664,382	139,917,807	6	139,788,838	139,789,925
Pik3c2g	1203730	6	139,664,382	139,917,807	6	139,864,605	139,882,163
Plcz1	2150308	6	139,938,197	139,989,978	6	139,939,182	139,950,758
Cmas	1337124	6	142,705,206	142,724,234	6	142,719,701	142,721,973
Gm7457	3648132	6	142,762,751	142,782,014	6	142,768,112	142,806,140
St8sia1	106011	6	142,770,065	142,912,972	6	142,768,112	142,806,140
D6Ertd474e	1196315	6	143,194,408	143,245,792	6	143,197,769	143,206,183
Lrmp	108424	6	145,064,173	145,123,454	6	145,108,944	145,120,036
Ifltd1	1921321	6	145,313,654	145,562,839	6	145,308,959	145,315,910
Vmn1r58	3033473	7	5,360,494	5,364,747	7	5,363,956	5,499,501
Vmn1r59	3033479	7	5,405,429	5,406,361	7	5,363,956	5,499,501
Gm7025	3645676	7	5,411,721	5,415,102	7	5,363,956	5,499,501
Vmn2r28	3645468	7	5,432,058	5,445,453	7	5,363,956	5,499,501
Vmn1r60	3645244	7	5,490,908	5,498,753	7	5,363,956	5,499,501
Zfp583	2682297	7	6,267,262	6,282,887	7	6,274,816	6,275,328
Vmn2r39	3704108	7	9,147,119	9,163,358	7	9,155,987	10,622,466
Vmn2r40	3757872	7	9,246,337	9,270,665	7	9,155,987	10,622,466
Gm3644	3781820	7	9,327,233	9,329,627	7	9,155,987	10,622,466
Gm4033	3782207	7	9,422,918	9,438,995	7	9,155,987	10,622,466
Vmn2r45	3757883	7	9,638,195	9,656,739	7	9,155,987	10,622,466
Vmn2r44	3643088	7	9,744,040	9,760,130	7	9,155,987	10,622,466
Gm7696	3649133	7	9,769,212	9,776,255	7	9,155,987	10,622,466
Gm10303	3642900	7	9,774,107	9,820,158	7	9,155,987	10,622,466
Gm3654	3781830	7	9,835,626	9,844,689	7	9,155,987	10,622,466
Vmn2r43	3037819	7	9,866,727	9,882,979	7	9,155,987	10,622,466
Vmn2r42	1316666	7	9,927,007	9,944,065	7	9,155,987	10,622,466
Vmn2r41	3757876	7	9,965,677	9,989,982	7	9,155,987	10,622,466
Gm4082	3782257	7	10,034,293	10,041,283	7	9,155,987	10,622,466
Gm3670	3781846	7	10,046,523	10,048,914	7	9,155,987	10,622,466
Gm3680	3781856	7	10,162,947	10,223,709	7	9,155,987	10,622,466
Vmn2r46	3757899	7	10,333,109	10,355,920	7	9,155,987	10,622,466
Vmn2r47	3757929	7	10,401,183	10,426,790	7	9,155,987	10,622,466
2810047C21Rik1	1919966	7	10,455,317	10,462,312	7	9,155,987	10,622,466
Vmn2r48	3647749	7	10,512,973	10,538,925	7	9,155,987	10,622,466
Vmn2r49	3757933	7	10,560,652	10,577,604	7	9,155,987	10,622,466
Vmn2r50	3643086	7	10,622,317	10,635,663	7	9,155,987	10,622,466
Nlrp4d	3056574	7	10,944,250	10,974,284	7	10,962,599	10,978,345
Gm4186	3782362	7	12,194,634	12,199,462	7	12,198,129	12,258,765
Vmn1r72	2182256	7	12,254,948	12,255,868	7	12,198,129	12,258,765
Vmn1r78	2159646	7	12,737,813	12,738,754	7	12,712,933	12,770,476
V1rg10	2159654	7	12,761,542	12,762,462	7	12,712,933	12,770,476
Crxos1	2451355	7	16,467,966	16,489,358	7	16,481,510	16,489,413
Nlrp9b	2675377	7	20,593,372	20,658,655	7	20,658,198	24,083,399
Vmn1r91	3649070	7	20,685,282	20,687,430	7	20,658,198	24,083,399

Symbol	MGI ID	Gene			CNV		
		Chr	Start	End	Chr	Start	End
Gm16442	3645807	7	20,707,005	20,707,928	7	20,658,198	24,083,399
Vmn1r93	3033490	7	20,723,472	20,724,437	7	20,658,198	24,083,399
Vmn1r94	3647287	7	20,752,809	20,754,950	7	20,658,198	24,083,399
Gm4494	3782679	7	20,779,059	20,779,982	7	20,658,198	24,083,399
Gm6164	3647652	7	20,790,033	20,792,784	7	20,658,198	24,083,399
Gm4498	3782683	7	20,818,257	20,820,367	7	20,658,198	24,083,399
Gm5890	3649012	7	20,845,734	20,848,210	7	20,658,198	24,083,399
Gm4133	3782309	7	20,918,491	20,920,627	7	20,658,198	24,083,399
Gm4505	3782690	7	20,954,049	20,955,399	7	20,658,198	24,083,399
Gm5728	3644398	7	20,960,112	20,960,759	7	20,658,198	24,083,399
Vmn1r100	3704284	7	21,003,291	21,004,214	7	20,658,198	24,083,399
Vmn1r101	3782311	7	21,027,019	21,029,474	7	20,658,198	24,083,399
Gm10670	3642641	7	21,059,309	21,060,274	7	20,658,198	24,083,399
Vmn1r103	3647681	7	21,094,966	21,095,883	7	20,658,198	24,083,399
Vmn1r104	3644682	7	21,115,876	21,120,109	7	20,658,198	24,083,399
Gm5726	3644395	7	21,130,183	21,131,106	7	20,658,198	24,083,399
Gm4141	3782317	7	21,160,670	21,163,486	7	20,658,198	24,083,399
Vmn1r107	3780017	7	21,253,034	21,255,190	7	20,658,198	24,083,399
Gm4144	3782320	7	21,287,648	21,290,505	7	20,658,198	24,083,399
Gm5156	3648210	7	21,309,861	21,312,330	7	20,658,198	24,083,399
Vmn1r109	3782702	7	21,336,572	21,358,986	7	20,658,198	24,083,399
Vmn1r110	3782704	7	21,452,703	21,454,859	7	20,658,198	24,083,399
Vmn1r111	3645811	7	21,487,315	21,490,172	7	20,658,198	24,083,399
Gm10668	3642587	7	21,509,544	21,512,013	7	20,658,198	24,083,399
Vmn1r112	3649076	7	21,554,842	21,557,259	7	20,658,198	24,083,399
Vmn1r113	3647303	7	21,571,119	21,573,227	7	20,658,198	24,083,399
Vmn1r114	3642588	7	21,596,240	21,597,205	7	20,658,198	24,083,399
Vmn1r115	3645605	7	21,598,432	21,630,004	7	20,658,198	24,083,399
Vmn1r116	3648873	7	21,655,913	21,658,361	7	20,658,198	24,083,399
Vmn1r118	3645425	7	21,696,446	21,699,271	7	20,658,198	24,083,399
Vmn1r119	2686293	7	21,796,551	21,798,681	7	20,658,198	24,083,399
Gm4534	3782718	7	21,832,092	21,833,442	7	20,658,198	24,083,399
Vmn1r120	3647340	7	21,838,156	21,838,803	7	20,658,198	24,083,399
Vmn1r121	3648662	7	21,882,495	21,884,610	7	20,658,198	24,083,399
Vmn1r122	3647341	7	21,918,230	21,920,358	7	20,658,198	24,083,399
Vmn1r123	2686292	7	21,945,268	21,948,127	7	20,658,198	24,083,399
Vmn1r124	3779910	7	22,044,713	22,045,636	7	20,658,198	24,083,399
Vmn1r125	3704112	7	22,057,198	22,058,121	7	20,658,198	24,083,399
Vmn1r126	3782346	7	22,085,521	22,087,648	7	20,658,198	24,083,399
Vmn1r127	3779578	7	22,103,963	22,104,880	7	20,658,198	24,083,399
Vmn1r128	3643535	7	22,133,033	22,135,478	7	20,658,198	24,083,399
Vmn1r129	3645471	7	22,145,387	22,146,310	7	20,658,198	24,083,399
Gm6882	3645601	7	22,210,877	22,214,131	7	20,658,198	24,083,399
Vmn1r130	3782726	7	22,295,568	22,297,722	7	20,658,198	24,083,399
Gm4172	3782348	7	22,330,189	22,331,109	7	20,658,198	24,083,399
Vmn1r132	3647009	7	22,379,150	22,400,150	7	20,658,198	24,083,399
Gm4175	3782351	7	22,545,550	22,546,494	7	20,658,198	24,083,399
Gm4177	3782353	7	22,580,830	22,581,747	7	20,658,198	24,083,399
Vmn1r135	3648167	7	22,616,009	22,618,456	7	20,658,198	24,083,399
Gm5725	3644396	7	22,628,363	22,629,286	7	20,658,198	24,083,399

Symbol	MGI ID	Gene			CNV		
		Chr	Start	End	Chr	Start	End
Gm5891	3649014	7	22,694,453	22,706,310	7	20,658,198	24,083,399
Vmn1r137	3782735	7	22,779,606	22,780,529	7	20,658,198	24,083,399
Gm4179	3782355	7	22,812,996	22,813,916	7	20,658,198	24,083,399
Gm6176	3644439	7	22,835,224	22,837,694	7	20,658,198	24,083,399
Vmn1r139	3644494	7	22,880,539	22,882,941	7	20,658,198	24,083,399
Gm10666	3704285	7	22,918,795	22,919,760	7	20,658,198	24,083,399
Vmn1r142	3644264	7	22,921,033	22,949,054	7	20,658,198	24,083,399
Vmn1r143	3644289	7	22,973,034	22,975,482	7	20,658,198	24,083,399
Gm8653	3647206	7	22,985,360	22,986,283	7	20,658,198	24,083,399
Gm8453	3644807	7	23,013,583	23,016,408	7	20,658,198	24,083,399
Gm4557	3782741	7	23,041,055	23,053,029	7	20,658,198	24,083,399
Gm4187	3782363	7	23,113,813	23,115,951	7	20,658,198	24,083,399
Gm4562	3782746	7	23,149,347	23,150,697	7	20,658,198	24,083,399
Gm8660	3645692	7	23,155,411	23,156,058	7	20,658,198	24,083,399
Vmn1r148	3033483	7	23,198,602	23,199,525	7	20,658,198	24,083,399
Vmn1r149	3782370	7	23,222,325	23,224,770	7	20,658,198	24,083,399
Gm10665	3642415	7	23,248,129	23,249,094	7	20,658,198	24,083,399
Vmn1r151	3644394	7	23,283,780	23,284,697	7	20,658,198	24,083,399
Vmn1r152	3643438	7	23,304,677	23,308,909	7	20,658,198	24,083,399
Gm8677	3646576	7	23,318,983	23,319,906	7	20,658,198	24,083,399
Gm4201	3782378	7	23,349,442	23,352,258	7	20,658,198	24,083,399
Vmn1r155	3646821	7	23,441,804	23,443,960	7	20,658,198	24,083,399
Gm8693	3642968	7	23,476,416	23,479,273	7	20,658,198	24,083,399
Gm4567	3809658	7	23,498,630	23,501,099	7	20,658,198	24,083,399
Vmn1r157	3646139	7	23,545,352	23,547,771	7	20,658,198	24,083,399
Gm4569	3782752	7	23,558,213	23,560,407	7	20,658,198	24,083,399
Vmn1r158	3646143	7	23,574,878	23,577,983	7	20,658,198	24,083,399
Vmn1r159	3642763	7	23,627,707	23,628,624	7	20,658,198	24,083,399
Vmn1r160	3779564	7	23,654,307	23,657,166	7	20,658,198	24,083,399
Gm4214	3782390	7	23,768,748	23,770,864	7	20,658,198	24,083,399
Gm4216	3782392	7	23,804,025	23,806,166	7	20,658,198	24,083,399
Vmn1r163	3644349	7	23,839,198	23,841,645	7	20,658,198	24,083,399
Gm8720	3647550	7	23,851,552	23,852,475	7	20,658,198	24,083,399
Gm10662	3642760	7	23,917,642	23,929,499	7	20,658,198	24,083,399
Vmn1r165	3782762	7	24,001,119	24,003,274	7	20,658,198	24,083,399
Gm4220	3782396	7	24,035,781	24,038,453	7	20,658,198	24,083,399
Gm6902	3647238	7	24,057,820	24,060,289	7	20,658,198	24,083,399
Cyp2a5	88597	7	27,620,358	27,628,282	7	27,627,143	27,736,250
Cyp2a22	3648316	7	27,716,650	27,724,405	7	27,627,143	27,736,250
Polr2i	1917170	7	31,016,967	31,018,409	7	31,017,542	31,018,654
Ovol3	2388075	7	31,018,512	31,020,744	7	31,017,542	31,018,654
Gm6666	3646173	7	32,551,971	32,552,438	7	32,532,002	32,694,597
Chst8	1916197	7	35,459,487	35,597,730	7	35,461,546	35,461,901
Pepd	97542	7	35,697,398	35,829,729	7	35,802,070	35,807,318
1600014C10Rik	1919494	7	38,968,835	38,979,989	7	38,961,668	38,997,301
Gm6605	3644762	7	39,231,315	39,237,190	7	39,096,069	46,665,068
Gm5591	3648692	7	39,303,158	39,313,212	7	39,096,069	46,665,068
Gm4454	3782638	7	39,351,859	39,356,187	7	39,096,069	46,665,068
Gm1988	3780157	7	46,425,170	46,435,208	7	39,096,069	46,665,068
Gm6124	3779556	7	46,474,468	46,480,344	7	39,096,069	46,665,068

Symbol	MGI ID	Gene			CNV		
		Chr	Start	End	Chr	Start	End
Gm16387	3646111	7	46,511,994	46,519,904	7	39,096,069	46,665,068
Gm6833	3645553	7	46,562,898	46,572,951	7	39,096,069	46,665,068
Gm9271	3646449	7	46,617,645	46,623,502	7	39,096,069	46,665,068
Gm5114	3647631	7	46,662,664	46,668,530	7	39,096,069	46,665,068
Gm2128	3780298	7	48,410,845	48,414,225	7	48,319,662	48,548,430
Gm6866	3646160	7	48,465,535	48,474,629	7	48,319,662	48,548,430
Gm5592	3648691	7	48,539,697	48,545,553	7	48,319,662	48,548,430
Siglece	1932475	7	50,906,442	50,915,515	7	50,914,593	50,919,381
Gm9717	3780126	7	54,810,742	54,813,572	7	54,813,251	54,974,058
Mrgpra3	2684085	7	54,844,320	54,856,742	7	54,813,251	54,974,058
Gm2707	3780876	7	54,923,462	54,924,124	7	54,813,251	54,974,058
Gm5733	3642992	7	54,988,369	55,007,892	7	54,976,185	55,008,187
Gm5734	3647104	7	55,170,688	55,173,073	7	55,052,585	55,194,801
Mrgprb4	3033119	7	55,453,583	55,454,548	7	55,454,535	55,702,761
Mrgprb13	3033193	7	55,566,674	55,567,693	7	55,454,535	55,702,761
Mrgprb8	3033134	7	55,643,953	55,644,945	7	55,454,535	55,702,761
Mrgprb1	3033115	7	55,702,480	55,703,532	7	55,454,535	55,702,761
Mctp2	2685335	7	79,222,718	79,451,481	7	79,385,029	79,385,270
5730590G19Rik	1924261	7	86,805,082	86,843,020	7	86,827,857	86,840,870
Olfr555	3030389	7	109,807,337	109,808,284	7	109,794,774	109,817,326
Olfr558	3030392	7	109,850,845	109,860,568	7	109,855,744	109,858,484
Olfr572	3030406	7	110,076,144	110,077,100	7	110,073,824	110,096,332
Olfr582	3030416	7	110,189,995	110,190,954	7	110,142,788	110,201,227
Olfr583	3030417	7	110,199,814	110,200,773	7	110,142,788	110,201,227
Dub2a	3051372	7	110,398,251	110,401,019	7	110,370,159	110,491,407
Olfr596	3030430	7	110,458,237	110,459,175	7	110,370,159	110,491,407
Olfr597	3030431	7	110,468,915	110,469,874	7	110,370,159	110,491,407
Olfr598	3030432	7	110,477,002	110,477,961	7	110,370,159	110,491,407
Olfr599	3030433	7	110,486,570	110,487,517	7	110,370,159	110,491,407
Olfr631	3030465	7	111,077,339	111,078,298	7	111,067,015	111,077,749
Olfr635	3030469	7	111,127,690	111,128,655	7	111,120,174	111,154,197
Olfr638	3030472	7	111,151,773	111,152,738	7	111,120,174	111,154,197
Trim34-1	2137359	7	111,392,973	111,489,207	7	111,428,102	111,428,284
Trim34-1	2137359	7	111,392,973	111,489,207	7	111,485,184	111,501,846
Trim5	3646853	7	111,411,900	111,436,608	7	111,428,102	111,428,284
Gm15134	3805550	7	111,448,744	111,485,423	7	111,485,184	111,501,846
Trim12-2	4821183	7	111,487,268	111,501,876	7	111,485,184	111,501,846
Trim79	3035181	7	111,618,528	111,656,363	7	111,647,983	111,683,670
Olfr686	3030520	7	112,351,902	112,352,855	7	112,352,842	112,433,900
Olfr687	3030521	7	112,424,010	112,424,975	7	112,352,842	112,433,900
Olfr471	3030305	7	115,004,566	115,005,492	7	115,004,586	115,041,563
Olfr485	3030319	7	115,302,432	115,303,375	7	115,300,845	115,399,384
Olfr486	3030320	7	115,315,312	115,316,256	7	115,300,845	115,399,384
Olfr487	3030321	7	115,355,097	115,356,041	7	115,300,845	115,399,384
Olfr488	3030322	7	115,398,706	115,399,650	7	115,300,845	115,399,384
Olfr494	3030328	7	115,511,006	115,511,950	7	115,511,458	115,540,995
Olfr495	3030329	7	115,538,636	115,539,628	7	115,511,458	115,540,995
Olfr497	3030331	7	115,566,087	115,567,031	7	115,566,346	115,604,872
Olfr506	3030340	7	115,755,823	115,756,767	7	115,735,206	115,755,917
Stk33	2152419	7	116,422,737	116,582,595	7	116,559,867	116,581,880

Symbol	MGI ID	Gene			Chr	CNV	
		Chr	Start	End		Start	End
Sbf2	1921831	7	117,452,860	117,758,436	7	117,633,683	117,650,114
Gp2	1914383	7	126,586,058	126,602,786	7	126,590,644	126,592,641
Gsg1l	2685483	7	133,024,217	133,225,925	7	133,164,530	133,182,625
Eif4ebp1	103267	8	28,370,850	28,385,985	8	28,371,247	28,479,196
Tex24	1921539	8	28,454,866	28,459,659	8	28,371,247	28,479,196
Chrn3	106212	8	28,479,183	28,510,201	8	28,371,247	28,479,196
Chrna6	106213	8	28,513,686	28,524,356	8	28,519,836	28,531,880
Gm1698	2686544	8	28,714,823	28,730,924	8	28,730,777	28,743,469
4930555F03Rik	1922609	8	50,456,240	50,606,449	8	50,456,466	50,456,470
Gm9892	3701610	8	53,281,117	53,282,553	8	53,127,775	53,284,994
Nr3c2	99459	8	79,423,341	79,768,911	8	79,438,032	79,453,386
Prmt10	2142651	8	80,073,306	80,105,237	8	80,087,901	80,089,033
Prmt10	2142651	8	80,073,306	80,105,237	8	80,089,624	80,092,244
Ttc29	1920551	8	80,737,196	80,918,225	8	80,806,213	80,834,051
1700047G07Rik	1920573	8	99,036,240	99,037,504	8	99,036,252	99,037,492
Wwox	1931237	8	116,963,555	117,876,608	8	117,488,656	117,647,628
Galnt2	894694	8	122,434,741	126,869,624	8	124,603,535	124,616,409
Dpy19l1	1915685	9	24,216,220	24,307,584	9	24,281,885	24,282,276
Gm9896	3641839	9	35,655,620	35,656,126	9	35,652,844	35,929,172
Gm3428	3781606	9	35,656,171	35,657,517	9	35,652,844	35,929,172
9230113P08Rik	1925158	9	35,716,027	35,717,300	9	35,652,844	35,929,172
Gm5916	3643162	9	35,927,519	35,936,364	9	35,652,844	35,929,172
Ccdc15	2444488	9	37,083,420	37,155,977	9	37,086,445	37,086,843
Olfr25	109310	9	38,137,174	38,138,115	9	38,126,083	38,141,452
Olfr918	3030752	9	38,480,089	38,481,066	9	38,480,102	38,488,311
Olfr951	3030785	9	39,201,378	39,202,322	9	39,149,141	39,234,634
Olfr952	3030786	9	39,233,710	39,234,654	9	39,149,141	39,234,634
Trim43a	3645218	9	88,475,874	88,483,657	9	88,476,937	88,499,227
Bfsp2	1333828	9	103,327,250	103,382,658	9	103,355,461	103,358,235
Clasp2	1923749	9	113,721,704	113,828,815	9	113,721,718	113,722,368
Gpd1l	1289257	9	114,808,459	114,843,105	9	114,814,094	114,815,852
Golga4	1859646	9	118,415,436	118,491,637	9	118,476,311	118,491,621
Ppil4	1914668	10	7,512,689	7,542,933	10	7,534,475	7,534,653
Utrn	104631	10	12,101,986	12,581,533	10	12,334,301	12,334,411
4930444G20Rik	2149738	10	21,786,398	21,787,885	10	21,769,739	22,093,887
E030030I06Rik	2442914	10	21,833,938	21,868,629	10	21,769,739	22,093,887
Raet1c	109431	10	21,878,375	22,093,945	10	21,769,739	22,093,887
Raet1e	2675273	10	21,893,327	21,903,720	10	21,769,739	22,093,887
Gm2555	3780723	10	21,936,313	21,938,830	10	21,769,739	22,093,887
H60b	3649078	10	21,993,152	22,008,655	10	21,769,739	22,093,887
Raet1d	1861032	10	22,082,077	22,093,945	10	21,769,739	22,093,887
Enpp1	97370	10	24,357,720	24,431,965	10	24,369,091	24,369,167
4930431F10Rik	1918888	10	44,450,575	44,458,706	10	44,430,245	44,548,182
Col13a1	1277201	10	61,300,984	61,441,856	10	61,300,867	61,301,038
Bicc1	1933388	10	70,385,580	70,622,448	10	70,494,361	70,494,548
Pcdh15	1891428	10	72,562,090	74,112,482	10	73,046,724	73,090,099
Dram1	1918962	10	87,785,549	87,841,825	10	87,785,880	87,786,384
Nav3	2183703	10	109,119,716	109,437,275	10	109,341,525	109,363,075
Il22	1355307	10	117,641,998	117,647,098	10	117,614,479	117,746,451
Il1fb	2151139	10	117,726,685	117,732,094	10	117,614,479	117,746,451

Symbol	MGI ID	Gene			CNV		
		Chr	Start	End	Chr	Start	End
Arhgap9	2143764	10	126,760,783	126,766,999	10	126,764,978	126,765,568
Vmn2r85	3646965	10	129,855,317	129,866,668	10	129,849,758	129,883,067
Selm	2149786	11	3,414,687	3,417,354	11	3,416,276	3,416,511
Ehbp1	2667252	11	21,905,831	22,242,295	11	22,235,060	22,253,961
Pnpt1	1918951	11	29,030,744	29,061,828	11	29,035,527	29,037,126
Hba-a2	96016	11	32,196,489	32,197,298	11	32,188,750	32,201,707
Hbq1	2685722	11	32,200,069	32,200,873	11	32,188,750	32,201,707
Ranbp17	1929706	11	33,111,795	33,413,746	11	33,113,226	33,113,486
Ranbp17	1929706	11	33,111,795	33,413,746	11	33,359,372	33,375,067
D130052B06Rik	2685092	11	33,499,302	33,524,013	11	33,520,397	33,534,591
Kcnp1	1917607	11	33,529,339	33,893,152	11	33,520,397	33,534,591
Slit3	1315202	11	34,934,726	35,522,009	11	35,243,687	35,260,436
Timd2	2159681	11	46,483,511	46,520,563	11	46,482,581	46,488,864
Sgcd	1346525	11	46,709,755	47,802,471	11	47,002,461	47,007,067
9930111J21Rik2	3711310	11	48,829,376	48,864,744	11	48,851,297	48,886,868
Olfr56	1333785	11	48,864,235	48,948,889	11	48,851,297	48,886,868
Tgtp2	3710083	11	48,870,696	48,877,708	11	48,851,297	48,886,868
Zfp867	2681848	11	59,275,298	59,285,976	11	59,279,699	59,279,901
Tom1l2	2443306	11	60,040,217	60,166,407	11	60,139,991	60,140,876
Ncor1	1349717	11	62,129,928	62,272,043	11	62,217,314	62,234,630
Nlrp1b	3582959	11	70,966,604	71,044,235	11	70,974,623	71,017,152
Trpv1	1341787	11	73,047,794	73,074,744	11	73,070,371	73,074,216
Zfp735	1923640	11	73,502,280	73,527,300	11	73,503,033	73,598,632
Olfr389	3030223	11	73,589,889	73,594,091	11	73,503,033	73,598,632
Olfr390	3030224	11	73,596,468	73,601,377	11	73,503,033	73,598,632
Krt32	1309995	11	99,942,162	99,949,540	11	99,948,025	99,948,032
Gm11735	3713525	11	116,599,248	116,611,242	11	116,602,360	116,630,414
BC018473	3039625	11	116,613,481	116,620,687	11	116,602,360	116,630,414
St6galnac1	1341826	11	116,626,339	116,636,821	11	116,602,360	116,630,414
Fn3k	1926834	11	121,296,227	121,311,805	11	121,303,097	121,310,264
Gm10480	3642435	12	18,223,364	18,224,634	12	18,193,095	18,552,020
Gm9590	3779999	12	18,394,561	18,413,667	12	18,193,095	18,552,020
5730507C01Rik	1917882	12	18,521,544	18,540,997	12	18,193,095	18,552,020
Pxdn	1916925	12	30,622,901	30,702,523	12	30,667,058	30,671,688
Nampt	1929865	12	33,505,340	33,536,472	12	33,508,991	33,511,756
Tmem195	2442495	12	37,968,228	38,308,789	12	38,175,763	38,194,460
Rpl17-ps3	3642206	12	68,611,724	68,612,318	12	68,607,278	68,622,771
Syne2	2449316	12	76,919,121	77,211,913	12	77,072,190	77,074,593
Mthfd1	1342005	12	77,356,395	77,420,789	12	77,397,670	77,403,999
Numb	107423	12	85,134,984	85,262,884	12	85,202,936	85,230,001
Gm2042	3800544	12	89,192,947	89,199,118	12	89,139,185	89,415,572
Gm2046	3780214	12	89,211,972	89,218,668	12	89,139,185	89,415,572
Gm2090	3780257	12	89,226,481	89,306,748	12	89,139,185	89,415,572
Gm6803	3779631	12	89,233,436	89,234,457	12	89,139,185	89,415,572
Gm2056	3780224	12	89,263,475	89,266,819	12	89,139,185	89,415,572
Gm5955	3779537	12	89,362,825	89,363,845	12	89,139,185	89,415,572
Gm10436	3704393	12	89,414,029	89,420,263	12	89,139,185	89,415,572
Rpl31-ps1	3644997	12	93,129,336	93,129,713	12	93,121,761	93,132,845
Eml5	2442513	12	100,024,814	100,139,694	12	100,077,912	100,080,008
Ttc8	1923510	12	100,158,784	100,221,448	12	100,214,407	100,217,042

Symbol	MGI ID	Gene			CNV		
		Chr	Start	End	Chr	Start	End
Catsperb	2443988	12	102,642,892	102,864,160	12	102,582,454	102,828,642
Eif5	95309	12	112,776,381	112,782,829	12	112,776,324	112,778,081
Gm16948	4439872	12	114,849,395	114,849,828	12	114,835,711	114,963,919
Gm16592	4439516	12	114,940,335	114,940,789	12	114,835,711	114,963,919
Gm16612	4439536	12	115,186,493	115,186,943	12	115,186,599	115,379,105
Gm16683	4439607	12	115,232,680	115,233,109	12	115,186,599	115,379,105
Gm16999	4439923	12	115,272,016	115,272,487	12	115,186,599	115,379,105
Gm16840	4439764	12	115,298,056	115,298,484	12	115,186,599	115,379,105
Gm16697	4439621	12	115,821,780	115,822,213	12	115,795,799	115,842,787
Gm16735	4439659	12	116,089,401	116,089,834	12	116,056,336	116,152,952
AB069917	3576502	12	116,396,614	116,397,046	12	116,359,895	116,583,730
Gm9740	3815333	12	116,532,277	116,532,573	12	116,359,895	116,583,730
Gm16709	4439633	12	116,996,195	116,996,627	12	116,745,882	117,040,993
Gm16710	4439634	12	117,040,859	117,041,291	12	116,745,882	117,040,993
Gm16746	4439670	12	117,100,078	117,100,511	12	117,059,447	117,200,047
Gm16812	4439736	12	117,106,984	117,107,413	12	117,059,447	117,200,047
Gm16747	4439671	12	117,190,749	117,191,042	12	117,059,447	117,200,047
Ptprn2	107418	12	117,724,306	118,515,266	12	117,915,807	117,945,526
Edaradd	1931001	13	12,569,175	12,612,715	13	12,573,915	12,574,894
Lyst	107448	13	13,682,676	13,869,707	13	13,804,037	13,805,108
5033411D12Rik	1923221	13	16,949,689	17,786,566	13	17,090,987	17,129,337
5033411D12Rik	1923221	13	16,949,689	17,786,566	13	17,220,681	17,226,530
5033411D12Rik	1923221	13	16,949,689	17,786,566	13	17,390,746	17,391,604
5033411D12Rik	1923221	13	16,949,689	17,786,566	13	17,574,927	17,603,308
Pou6f2	2443631	13	18,216,794	18,473,872	13	18,383,273	18,417,107
Vmn1r188	2182259	13	22,179,747	22,180,673	13	22,180,406	22,247,428
Vmn1r189	2182257	13	22,193,596	22,194,534	13	22,180,406	22,247,428
Hist1h3e	2448326	13	23,653,403	23,654,238	13	23,653,701	23,668,319
Hist1h2ae	2448290	13	23,662,531	23,662,990	13	23,653,701	23,668,319
Hist1h2bg	2448386	13	23,663,277	23,663,753	13	23,653,701	23,668,319
Hist1h2bf	2448383	13	23,665,605	23,666,065	13	23,653,701	23,668,319
Hist1h2ad	2448289	13	23,666,339	23,666,801	13	23,653,701	23,668,319
Hist1h3d	2448322	13	23,667,632	23,668,191	13	23,653,701	23,668,319
Mrs2	2685748	13	25,084,352	25,112,248	13	25,099,130	25,099,212
Gm7771	3779762	13	65,480,484	65,516,054	13	65,478,774	66,913,713
Gm10139	3642815	13	65,613,614	65,613,784	13	65,478,774	66,913,713
Gm6901	3647487	13	65,660,102	65,660,650	13	65,478,774	66,913,713
Gm7844	3648609	13	66,035,525	66,051,374	13	65,478,774	66,913,713
Gm6910	3648043	13	66,108,677	66,112,995	13	65,478,774	66,913,713
Gm10324	3642406	13	66,139,239	66,141,604	13	65,478,774	66,913,713
Gm3844	3782016	13	66,163,389	66,163,913	13	65,478,774	66,913,713
Gm16512	3849447	13	66,222,141	66,222,842	13	65,478,774	66,913,713
Gm10772	3704404	13	66,328,421	66,440,935	13	65,478,774	66,913,713
C330022B21Rik	1925949	13	66,443,221	66,450,214	13	65,478,774	66,913,713
2410141K09Rik	1924053	13	66,519,050	66,534,831	13	65,478,774	66,913,713
Zfp640	2678025	13	66,770,877	66,774,356	13	65,478,774	66,913,713
Gm7896	3779770	13	66,815,592	66,903,500	13	65,478,774	66,913,713
Gm3870	3782043	13	66,903,632	66,925,185	13	65,478,774	66,913,713
Zfp748	1916455	13	67,639,590	67,654,088	13	67,635,961	67,639,652
Cast	1098236	13	74,831,734	74,945,369	13	74,876,460	74,877,016

Symbol	MGI ID	Gene			CNV		
		Chr	Start	End	Chr	Start	End
Pde8b	2443999	13	95,794,409	96,020,291	13	95,862,954	95,864,309
Naip1	1298223	13	101,177,749	101,216,466	13	101,131,358	101,185,606
Gm9858	3809036	13	101,185,515	101,185,930	13	101,131,358	101,185,606
Depdc1b	2145425	13	109,106,531	109,179,751	13	109,177,164	109,203,852
Pde4d	99555	13	109,240,142	110,743,669	13	110,143,424	110,148,369
Pde4d	99555	13	109,240,142	110,743,669	13	110,285,017	110,360,210
Pde4d	99555	13	109,240,142	110,743,669	13	110,512,099	110,531,531
Map3k1	1346872	13	112,536,636	112,599,201	13	112,541,067	112,542,692
Arl15	2442308	13	114,584,767	114,947,637	13	114,694,855	114,724,317
Itga2	96600	13	115,626,120	115,722,249	13	115,684,513	115,685,411
D830030K20Rik	2443830	14	3,224,446	3,234,345	14	3,200,632	7,671,143
Gm2938	3781116	14	3,262,413	3,305,842	14	3,200,632	7,671,143
Gm1973	3780141	14	3,500,831	3,509,259	14	3,200,632	7,671,143
Gm2971	3781149	14	3,555,038	3,565,201	14	3,200,632	7,671,143
Gm11109	3779360	14	3,609,811	3,650,049	14	3,200,632	7,671,143
Gm3012	3781190	14	3,740,234	3,748,646	14	3,200,632	7,671,143
Gm3043	3781221	14	3,794,441	3,804,604	14	3,200,632	7,671,143
Gm11108	3779358	14	3,857,482	3,888,475	14	3,200,632	7,671,143
Gm2916	3781094	14	3,987,268	4,023,710	14	3,200,632	7,671,143
Gm3029	3781207	14	4,034,788	4,043,240	14	3,200,632	7,671,143
Gm3099	3781275	14	4,101,430	4,105,967	14	3,200,632	7,671,143
Gm5796	3779522	14	4,126,977	4,144,402	14	3,200,632	7,671,143
Gm11107	3779354	14	4,152,594	4,152,947	14	3,200,632	7,671,143
Gm3115	3781291	14	4,187,137	4,202,348	14	3,200,632	7,671,143
Gm11106	3779353	14	4,227,660	4,304,206	14	3,200,632	7,671,143
Gm2969	3781147	14	4,252,230	4,265,441	14	3,200,632	7,671,143
Gm3127	3781303	14	4,268,063	4,276,545	14	3,200,632	7,671,143
Gm2974	3781152	14	4,285,498	4,301,067	14	3,200,632	7,671,143
Gm11105	3779351	14	4,322,357	4,369,319	14	3,200,632	7,671,143
Gm3149	3781328	14	4,420,333	4,423,722	14	3,200,632	7,671,143
2610042L04Rik	1914305	14	4,450,931	4,454,214	14	3,200,632	7,671,143
Gm3159	3781338	14	4,500,565	4,509,390	14	3,200,632	7,671,143
Gm3164	3781343	14	4,518,487	4,546,969	14	3,200,632	7,671,143
Gm11104	3779350	14	4,523,342	4,620,137	14	3,200,632	7,671,143
Gm3182	3781361	14	4,584,778	4,593,219	14	3,200,632	7,671,143
Gm3047	3781225	14	4,658,389	4,663,264	14	3,200,632	7,671,143
Gm8160	3779785	14	4,696,944	4,725,542	14	3,200,632	7,671,143
Gm8159	3647882	14	4,735,385	4,743,844	14	3,200,632	7,671,143
Gm7876	3779769	14	4,812,271	4,820,720	14	3,200,632	7,671,143
Gm3084	3781261	14	4,854,184	4,876,749	14	3,200,632	7,671,143
Gm9602	3780010	14	4,879,456	4,887,819	14	3,200,632	7,671,143
Gm3269	3781447	14	4,941,081	4,949,909	14	3,200,632	7,671,143
Gm3278	3781456	14	4,995,388	5,005,458	14	3,200,632	7,671,143
Gm10410	3704422	14	5,033,491	5,070,298	14	3,200,632	7,671,143
Gm8297	3643799	14	5,086,954	5,095,437	14	3,200,632	7,671,143
4930555G01Rik	1922055	14	5,153,654	5,158,193	14	3,200,632	7,671,143
Gm8279	3779794	14	5,234,555	5,242,962	14	3,200,632	7,671,143
Gm8271	3648017	14	5,289,766	5,295,956	14	3,200,632	7,671,143
Gm8265	3779792	14	5,380,853	5,383,335	14	3,200,632	7,671,143
Gm3170	3781349	14	5,440,426	5,529,224	14	3,200,632	7,671,143

Symbol	MGI ID	Gene			CNV		
		Chr	Start	End	Chr	Start	End
Gm3187	3781366	14	5,627,616	5,639,667	14	3,200,632	7,671,143
Gm8246	3644639	14	5,642,315	5,650,767	14	3,200,632	7,671,143
Gm10411	3809931	14	5,746,793	6,807,313	14	3,200,632	7,671,143
Gm3208	3781387	14	5,801,656	5,802,210	14	3,200,632	7,671,143
Gm3215	3781394	14	5,884,981	5,910,940	14	3,200,632	7,671,143
Gm10021	3704419	14	5,939,043	5,945,054	14	3,200,632	7,671,143
Gm3424	3781602	14	5,953,952	5,962,408	14	3,200,632	7,671,143
Gm3229	3781407	14	5,965,032	5,978,214	14	3,200,632	7,671,143
Gm3453	3781629	14	6,102,765	6,111,220	14	3,200,632	7,671,143
Gm3253	3781431	14	6,113,825	6,137,717	14	3,200,632	7,671,143
Gm6337	3646283	14	6,181,493	6,190,290	14	3,200,632	7,671,143
Gm3476	3781652	14	6,254,438	6,257,817	14	3,200,632	7,671,143
Gm10412	3704421	14	6,419,624	6,428,031	14	3,200,632	7,671,143
Gm10341	3704418	14	6,436,949	6,442,922	14	3,200,632	7,671,143
Gm3532	3781709	14	6,473,815	6,481,826	14	3,200,632	7,671,143
Gm3339	3781517	14	6,566,120	6,568,602	14	3,200,632	7,671,143
Gm3341	3781519	14	6,606,068	6,606,622	14	3,200,632	7,671,143
Gm3348	3781526	14	6,625,664	6,714,472	14	3,200,632	7,671,143
Gm3518	3781695	14	6,757,505	6,765,963	14	3,200,632	7,671,143
Gm3366	3781544	14	6,768,607	6,780,658	14	3,200,632	7,671,143
Gm3537	3781714	14	6,826,568	6,833,633	14	3,200,632	7,671,143
Gm10413	3704417	14	6,956,283	6,964,644	14	3,200,632	7,671,143
Gm10409	3710610	14	6,973,735	6,991,566	14	3,200,632	7,671,143
Gm10408	3704423	14	7,012,367	7,019,561	14	3,200,632	7,671,143
Gm3411	3781589	14	7,108,987	7,119,890	14	3,200,632	7,671,143
Gm3597	3781774	14	7,128,838	7,137,317	14	3,200,632	7,671,143
Gm3618	3781794	14	7,147,390	7,184,414	14	3,200,632	7,671,143
Gm16440	3647179	14	7,213,235	7,222,886	14	3,200,632	7,671,143
Gm10407	3779113	14	7,241,753	7,423,174	14	3,200,632	7,671,143
Gm3594	3781771	14	7,268,307	7,277,125	14	3,200,632	7,671,143
Gm5957	3779539	14	7,353,014	7,357,762	14	3,200,632	7,671,143
Gm8356	3779798	14	7,361,348	7,369,724	14	3,200,632	7,671,143
Gm3460	3781636	14	7,451,887	7,454,929	14	3,200,632	7,671,143
Gm10251	3704424	14	7,470,934	7,516,684	14	3,200,632	7,671,143
Gm8050	3779779	14	7,544,695	7,552,743	14	3,200,632	7,671,143
Gm8362	3648195	14	7,598,473	7,606,931	14	3,200,632	7,671,143
Gm3475	3781651	14	7,656,238	7,656,792	14	3,200,632	7,671,143
Gm3642	3781818	14	7,664,528	7,672,902	14	3,200,632	7,671,143
4930452B06Rik	1926154	14	9,263,706	9,498,754	14	9,476,924	9,491,919
Fhit	1277947	14	10,382,606	11,994,549	14	11,851,066	11,874,015
Ngly1	1913276	14	17,081,809	17,144,440	14	17,144,372	17,180,428
Prkcd	97598	14	31,408,544	31,439,396	14	31,420,361	31,420,623
Wapal	2675859	14	35,487,114	35,561,169	14	35,539,377	35,543,834
Ghitm	1913342	14	37,935,137	37,948,484	14	37,935,152	37,946,976
Sh2d4b	1925182	14	41,627,078	41,706,555	14	41,640,656	41,648,076
Gm7929	3646066	14	42,042,756	42,078,395	14	42,076,755	42,953,331
Gm7945	3646596	14	42,194,917	42,199,642	14	42,076,755	42,953,331
Gm6482	3644578	14	42,216,174	42,221,564	14	42,076,755	42,953,331
Gm7949	3642973	14	42,238,091	42,242,180	14	42,076,755	42,953,331
Gm7954	3648778	14	42,261,033	42,266,948	14	42,076,755	42,953,331

Symbol	MGI ID	Gene			CNV		
		Chr	Start	End	Chr	Start	End
Gm3486	3781663	14	42,297,518	42,302,789	14	42,076,755	42,953,331
Gm3522	3781699	14	42,348,742	42,364,714	14	42,076,755	42,953,331
Gm7970	3644387	14	42,363,409	42,368,866	14	42,076,755	42,953,331
Gm3539	3781716	14	42,405,411	42,481,925	14	42,076,755	42,953,331
Gm7980	3647449	14	42,480,620	42,486,091	14	42,076,755	42,953,331
1700049E17Rik1	1920665	14	42,503,887	42,511,844	14	42,076,755	42,953,331
1700024B05Rik	1922768	14	42,522,802	42,582,626	14	42,076,755	42,953,331
Gm9890	3642649	14	42,525,287	42,526,183	14	42,076,755	42,953,331
Gm6401	3645739	14	42,541,515	42,546,756	14	42,076,755	42,953,331
Gm3543	3781720	14	42,556,681	42,562,117	14	42,076,755	42,953,331
Gm7995	3779776	14	42,660,348	42,904,201	14	42,076,755	42,953,331
Gm3578	3781755	14	42,670,558	42,674,087	14	42,076,755	42,953,331
Gm7951	3648771	14	42,690,770	42,696,198	14	42,076,755	42,953,331
Gm3573	3781750	14	42,764,196	42,769,598	14	42,076,755	42,953,331
Gm9611	3780019	14	42,870,262	42,876,187	14	42,076,755	42,953,331
Gm10380	3642798	14	42,872,700	43,018,480	14	42,076,755	42,953,331
Gm7999	3643149	14	42,935,868	42,949,345	14	42,076,755	42,953,331
Gm10379	3642799	14	42,948,245	43,218,136	14	42,076,755	42,953,331
Ear1	108021	14	44,396,430	44,397,304	14	44,396,801	45,349,904
Ear10	1890464	14	44,500,385	44,501,224	14	44,396,801	45,349,904
Gm8113	3648791	14	44,503,055	44,511,076	14	44,396,801	45,349,904
Ang5	3528599	14	44,534,734	44,540,745	14	44,396,801	45,349,904
Ang3	1201793	14	44,540,146	44,540,583	14	44,396,801	45,349,904
Ang6	3528602	14	44,579,329	44,584,083	14	44,396,801	45,349,904
Gm3299	3781477	14	44,612,055	44,615,567	14	44,396,801	45,349,904
Ear2	108020	14	44,680,319	44,681,199	14	44,396,801	45,349,904
Gm3311	3781489	14	44,691,052	44,693,307	14	44,396,801	45,349,904
Gm3327	3781505	14	44,701,526	44,706,280	14	44,396,801	45,349,904
4930503E14Rik	1922204	14	44,740,832	44,749,036	14	44,396,801	45,349,904
Gm8212	3643591	14	44,775,332	44,780,798	14	44,396,801	45,349,904
Gm8220	3643828	14	44,863,255	44,868,733	14	44,396,801	45,349,904
Gm8224	3643831	14	44,868,096	44,887,627	14	44,396,801	45,349,904
Gm8229	3646979	14	44,943,028	44,948,506	14	44,396,801	45,349,904
Gm3371	3781549	14	44,981,840	44,986,482	14	44,396,801	45,349,904
Gm8232	3648583	14	45,052,782	45,058,224	14	44,396,801	45,349,904
Gm9677	3780085	14	45,056,919	45,072,083	14	44,396,801	45,349,904
BC061237	2682320	14	45,119,793	45,126,016	14	44,396,801	45,349,904
Gm8247	3644638	14	45,202,834	45,208,077	14	44,396,801	45,349,904
Gm8256	3779791	14	45,233,239	45,238,703	14	44,396,801	45,349,904
Gm6541	3647825	14	45,306,024	45,323,811	14	44,396,801	45,349,904
Gm8267	3648993	14	45,325,852	45,344,636	14	44,396,801	45,349,904
Wdfy2	2442811	14	63,456,581	63,575,291	14	63,523,410	63,543,436
Gm9195	3779838	14	72,825,820	72,891,655	14	72,880,516	72,895,559
Fndc3a	1196463	14	72,937,753	73,109,810	14	72,957,542	72,959,141
Gm4606	3782789	14	73,240,448	73,263,362	14	73,243,966	73,249,111
Lcp1	104808	14	75,530,908	75,630,649	14	75,621,182	75,623,938
Elf1	107180	14	79,881,001	79,982,283	14	79,921,672	79,935,942
Pibf1	1261910	14	99,498,652	99,653,712	14	99,527,482	99,532,575
Gpc5	1194894	14	115,491,848	116,923,659	14	116,640,642	116,643,475
Dock9	106321	14	121,941,261	122,097,639	14	122,006,064	122,006,350

Symbol	MGI ID	Gene			CNV		
		Chr	Start	End	Chr	Start	End
Cdh10	107436	15	18,750,084	18,943,989	15	18,713,339	18,756,200
Cdh12	109503	15	21,041,207	21,519,288	15	21,134,231	21,172,655
Gm2727	3780896	15	21,825,012	21,829,418	15	21,563,129	21,834,835
Csmd3	2386403	15	47,412,183	48,623,609	15	47,636,509	47,639,595
Csmd3	2386403	15	47,412,183	48,623,609	15	47,861,366	47,886,626
Csmd3	2386403	15	47,412,183	48,623,609	15	47,894,162	47,942,137
Csmd3	2386403	15	47,412,183	48,623,609	15	48,458,300	48,477,647
Depdc6	2146322	15	54,943,872	55,090,826	15	55,025,921	55,026,265
BC026439	2446114	15	57,075,322	57,309,180	15	57,135,310	57,181,123
Atad2	1917722	15	57,925,602	57,966,637	15	57,941,561	57,943,509
Gm2682	3780851	15	59,976,589	59,995,977	15	59,995,445	60,044,261
Lrrk2	1913975	15	91,503,606	91,646,551	15	91,559,592	91,567,072
Nell2	1858510	15	95,049,881	95,359,137	15	95,128,952	95,144,563
Gm10035	3710670	15	100,165,360	100,170,600	15	100,148,252	100,195,778
Mettl7a2	3026615	15	100,183,631	100,192,250	15	100,148,252	100,195,778
Higd1c	2685767	15	100,195,016	100,214,386	15	100,148,252	100,195,778
2010005H15Rik	1924020	16	36,231,414	36,257,530	16	36,257,364	36,334,363
Stfa1	106198	16	36,277,234	36,285,457	16	36,257,364	36,334,363
Gm4758	3648404	16	36,308,131	36,312,739	16	36,257,364	36,334,363
Gm1975	3780144	16	36,321,751	36,334,418	16	36,257,364	36,334,363
Naa50	1919367	16	44,139,943	44,163,479	16	44,159,384	44,159,604
Cd200	1196990	16	45,382,296	45,401,508	16	45,375,511	45,390,941
Tmem181a	1924356	17	6,270,475	6,305,783	17	6,255,961	6,909,183
Gm2792	3780960	17	6,407,216	6,410,679	17	6,255,961	6,909,183
Dynlt1b	98643	17	6,429,260	6,435,444	17	6,255,961	6,909,183
Gm2802	3780971	17	6,491,318	6,493,657	17	6,255,961	6,909,183
Gm2808	3780977	17	6,506,579	6,582,263	17	6,255,961	6,909,183
Dynlt1f	3780996	17	6,600,835	6,609,656	17	6,255,961	6,909,183
Dynlt1c	3807476	17	6,646,959	6,655,064	17	6,255,961	6,909,183
Gm2833	3781005	17	6,658,217	6,679,001	17	6,255,961	6,909,183
Gm2827	3780999	17	6,661,442	6,672,834	17	6,255,961	6,909,183
Gm2839	3781011	17	6,753,404	6,803,325	17	6,255,961	6,909,183
Dynlt1d	3781039	17	6,797,760	6,818,159	17	6,255,961	6,909,183
Dynlt1e	3781053	17	6,851,795	6,860,617	17	6,255,961	6,909,183
Gm2867	3781044	17	6,874,264	6,878,036	17	6,255,961	6,909,183
Sytl3	1933367	17	6,877,808	6,942,391	17	6,255,961	6,909,183
1700122H20Rik	1920867	17	7,100,289	7,106,067	17	7,098,601	7,157,189
Rsph3b	3630308	17	7,108,762	7,153,031	17	7,098,601	7,157,189
Tcp10b	98542	17	13,253,977	13,275,092	17	13,259,210	13,301,725
Gm11166	3810119	17	13,289,545	13,291,338	17	13,259,210	13,301,725
Unc93a	1933250	17	13,301,483	13,324,657	17	13,259,210	13,301,725
Gm10512	3642173	17	13,397,908	13,399,077	17	13,398,037	13,649,185
Smok2a	1351487	17	13,414,054	13,420,524	17	13,398,037	13,649,185
Smok2b	3037705	17	13,421,718	13,430,055	17	13,398,037	13,649,185
Gm9880	3711246	17	13,547,438	13,569,717	17	13,398,037	13,649,185
Vmn1r235	2159636	17	21,397,391	21,399,827	17	21,378,620	21,419,945
Gm3983	3782156	17	27,373,557	27,473,294	17	27,427,669	27,585,674
Gm10505	3642687	17	27,479,405	27,481,770	17	27,427,669	27,585,674
Grm4	1351341	17	27,559,332	27,650,286	17	27,427,669	27,585,674
Btbd9	1916625	17	30,357,046	30,667,310	17	30,582,926	31,058,945

Symbol	MGI ID	Gene			CNV		
		Chr	Start	End	Chr	Start	End
Gm9874	3642006	17	30,622,456	30,622,908	17	30,582,926	31,058,945
Glo1	95742	17	30,729,806	30,749,539	17	30,582,926	31,058,945
1700097N02Rik	1914772	17	30,759,394	30,762,030	17	30,582,926	31,058,945
Dnahc8	107714	17	30,763,936	31,012,209	17	30,582,926	31,058,945
Gm9937	3642051	17	31,011,751	31,012,146	17	30,582,926	31,058,945
Glp1r	99571	17	31,038,812	31,073,455	17	30,582,926	31,058,945
Sik1	104754	17	31,981,193	31,992,737	17	31,987,684	31,988,529
Cyp4f13	2158641	17	33,061,633	33,084,347	17	33,066,096	33,073,239
Myo1f	107711	17	33,692,664	33,744,703	17	33,712,337	33,713,456
Btnl3	1932027	17	34,514,077	34,522,973	17	34,521,273	34,521,839
Btnl6	1932038	17	34,644,880	34,654,297	17	34,644,200	34,650,995
H2-Q2	95931	17	35,479,278	35,482,667	17	35,482,411	35,482,653
H2-Q6	95935	17	35,561,822	35,565,306	17	35,565,259	35,576,419
H2-Q7	95936	17	35,576,161	35,580,588	17	35,565,259	35,576,419
H2-T24	95958	17	36,142,640	36,157,505	17	36,151,872	36,151,991
H2-T23	95957	17	36,166,921	36,169,646	17	36,167,127	36,248,347
H2-T22	95956	17	36,175,352	36,179,692	17	36,167,127	36,248,347
H2-T9	95965	17	36,175,352	36,179,692	17	36,167,127	36,248,347
Gm6034	3646212	17	36,179,906	36,195,590	17	36,167,127	36,248,347
Gm11127	3779381	17	36,193,272	36,193,385	17	36,167,127	36,248,347
H2-BI	892004	17	36,216,993	36,221,404	17	36,167,127	36,248,347
C920025E04Rik	2442805	17	36,246,172	36,248,792	17	36,167,127	36,248,347
H2-T10	95942	17	36,254,035	36,258,389	17	36,257,749	36,302,789
Gm10500	3641966	17	36,258,775	36,265,692	17	36,257,749	36,302,789
Gm10499	3702919	17	36,278,703	36,282,868	17	36,257,749	36,302,789
2410017I17Rik	1916967	17	36,292,064	36,292,354	17	36,257,749	36,302,789
Gm8909	3704134	17	36,301,918	36,305,467	17	36,257,749	36,302,789
Cyp39a1	1927096	17	43,804,474	43,887,794	17	43,822,177	43,822,413
Tcfef	103270	17	47,873,979	47,929,368	17	47,888,395	47,889,838
Kif6	1098238	17	49,754,461	50,049,172	17	49,818,440	49,818,487
Rftn1	1923688	17	50,131,582	50,329,999	17	50,132,851	50,143,591
Plcl2	1352756	17	50,648,742	50,827,795	17	50,703,622	50,708,249
Slc5a7	1927126	17	54,412,915	54,436,487	17	54,423,215	54,423,500
Dlgap1	1346065	17	70,318,413	71,170,753	17	70,419,780	70,420,015
Dlgap1	1346065	17	70,318,413	71,170,753	17	70,731,388	70,734,298
Alk	103305	17	72,218,328	72,953,049	17	72,689,319	72,703,908
Slc30a6	2386741	17	74,794,972	74,823,569	17	74,806,574	74,808,253
Hnrpll	1919942	17	80,429,683	80,461,608	17	80,443,846	80,449,220
Lrp1rc	1919666	17	85,104,587	85,190,129	17	85,125,658	85,126,027
Pigf	99462	17	87,396,596	87,424,746	17	87,411,269	87,421,277
Klraql	1921075	17	88,929,577	88,987,426	17	88,952,743	88,963,711
Npc1	1097712	18	12,348,202	12,394,909	18	12,384,760	12,387,394
Bin1	108092	18	32,536,911	32,595,385	18	32,594,220	32,604,842
Dpysl3	1349762	18	43,480,633	43,597,940	18	43,568,830	43,609,197
Gm3650	3781826	18	43,604,764	43,637,164	18	43,568,830	43,609,197
1700011I03Rik	1922694	18	57,693,434	57,890,719	18	57,820,265	57,902,448
Chsy3	1926173	18	59,335,331	59,570,100	18	59,506,767	59,507,938
Tcf4	98506	18	69,503,800	69,847,579	18	69,835,601	69,836,287
4930503L19Rik	1922045	18	70,612,794	70,632,134	18	70,602,756	70,623,157
Dcc	94869	18	71,418,392	72,510,723	18	71,609,676	71,611,282

Symbol	MGI ID	Gene			Chr	CNV	
		Chr	Start	End		Start	End
Myo5b	106598	18	74,600,590	74,931,147	18	74,681,698	74,696,062
Myo5b	106598	18	74,600,590	74,931,147	18	74,750,012	74,750,945
Dym	1918480	18	75,178,426	75,446,620	18	75,257,879	75,261,870
Rcor2	1859854	19	7,341,815	7,349,715	19	7,348,368	7,349,675
Gm9750	3642669	19	9,209,647	9,353,665	19	9,210,938	9,398,238
Gm6252	3644748	19	9,290,335	9,291,995	19	9,210,938	9,398,238
Gm2601	3780769	19	9,326,192	9,338,012	19	9,210,938	9,398,238
Ms4a6d	1916024	19	11,661,094	11,679,339	19	11,666,254	11,674,336
Olfr1431	3031265	19	12,284,058	12,284,996	19	12,220,912	12,308,914
Olfr1432	3031266	19	12,303,105	12,304,034	19	12,220,912	12,308,914
Olfr1502	3031336	19	13,936,285	13,937,235	19	13,926,464	13,952,598
Trpm3	2443101	19	22,213,609	23,064,374	19	22,260,383	22,278,255
Smarca2	99603	19	26,679,650	26,852,811	19	26,846,010	26,846,087
Rnls	1915045	19	33,212,237	33,466,755	19	33,386,117	33,438,568
Gm6857	3779637	19	33,572,527	33,592,270	19	33,521,544	33,634,022
Al747699	2147592	19	33,592,230	33,664,798	19	33,521,544	33,634,022
Ifit3	1101055	19	34,658,021	34,663,221	19	34,662,998	34,681,285
Gm14446	3650685	19	34,667,381	34,673,817	19	34,662,998	34,681,285
I830134H01Rik	3588250	19	38,127,342	38,127,794	19	38,127,355	38,132,440
Cep55	1921357	19	38,129,579	38,148,911	19	38,127,355	38,132,440
Erlin1	2387613	19	44,109,437	44,144,015	19	44,133,553	44,133,654
Pkd2l1	1352448	19	44,222,127	44,266,932	19	44,222,802	44,223,055
Pnlip	97722	19	58,744,855	58,756,276	19	58,755,311	58,769,822
Eif3a	95301	19	60,837,025	60,866,546	19	60,848,615	60,849,582
Pfkfb1	107816	X	147,022,772	147,078,421	X	147,048,432	147,056,301
Cnksr2	2661175	X	154,259,368	154,481,226	X	154,298,124	154,298,522
Mid1	1100537	X	166,123,131	166,428,730	X	166,341,476	166,428,718
G530011O06Rik	3603513	X	166,412,975	166,416,849	X	166,341,476	166,428,718