

**Table 5: The list of L1s' neighbouring genes and their locations**

No	LINE ID	chr number	refseq ID	LINE start	LINE end	refseq start	refseq end	LINE strand	Distance	refseq strand	Orientation	Refseq Difinition
1	UID2	chr18	NM_026092	4219421	4229862	4165829	4182234	+	-100k	+	S	lysozyme-like 1 precursor
2	UID4	chr18	NM_001100449	14872664	14883105	14926262	15043377	+	+100k	+	AS	TAF4B RNA polymerase II, TATA box binding
3	UID4	chr18	NM_001163609	14872664	14883105	14849168	14905317	+	-50k	+	S	proteasome alpha 8 subunit
4	UID10	chr18	NM_001033532	25353995	25364027	25312029	25610331	+	-50k	+	S	hypothetical protein LOC225289
5	UID10	chr18	NM_001142697	25353995	25364027	25279055	25308975	+	-100k	-	AS	tubulin polyglutamylase complex subunit 2
6	UID10	chr18	NM_001142698	25353995	25364027	25270232	25311887	+	-100k	-	AS	tubulin polyglutamylase complex subunit 2
7	UID10	chr18	NM_001004361	25353995	25364027	25279055	25311887	+	-100k	-	AS	tubulin polyglutamylase complex subunit 2
8	UID11	chr18	NM_001109988	33516959	33527400	33561829	33588840	+	+50k	-	AS	neuronal protein 3.1
9	UID11	chr18	NM_053078	33516959	33527400	33561829	33588445	+	+50k	-	AS	neuronal protein 3.1
10	UID11	chr18	NM_001109990	33516959	33527400	33561829	33588232	+	+50k	-	AS	neuronal protein 3.1
11	UID11	chr18	NM_001109989	33516959	33527400	33561829	33588558	+	+50k	-	AS	neuronal protein 3.1
12	UID13	chr18	NM_011901	37753607	37764050	37767995	37770121	+	+20k	-	AS	
13	UID13	chr18	NM_033587	37753607	37764050	37811373	37967844	+	+100k	+	AS	protocadherin gamma subfamily A, 4
14	UID13	chr18	NM_033589	37753607	37764050	37833202	37967844	+	+100k	+	AS	protocadherin gamma subfamily A, 6
15	UID13	chr18	NM_033575	37753607	37764050	37815832	37967846	+	+100k	+	AS	protocadherin gamma subfamily B, 2
16	UID13	chr18	NM_033586	37753607	37764050	37800308	37967846	+	+50k	+	AS	protocadherin gamma subfamily A, 3
17	UID13	chr18	NM_033588	37753607	37764050	37820474	37967844	+	+100k	+	AS	protocadherin gamma subfamily A, 5
18	UID13	chr18	NM_175770	37753607	37764050	37766464	37770178	+	+20k	-	AS	TAF7 RNA polymerase II, TATA box binding protein
19	UID13	chr18	NM_033590	37753607	37764050	37840807	37967846	+	+100k	+	AS	protocadherin gamma subfamily A, 7
20	UID13	chr18	NM_033585	37753607	37764050	37795078	37967844	+	+50k	+	AS	protocadherin gamma subfamily A, 2
21	UID13	chr18	NM_033576	37753607	37764050	37846527	37967844	+	+100k	+	AS	protocadherin gamma subfamily B, 4
22	UID13	chr18	NM_033584	37753607	37764050	37787918	37967844	+	+50k	+	AS	protocadherin gamma subfamily A, 1
23	UID13	chr18	NM_033574	37753607	37764050	37806431	37967844	+	+100k	+	AS	protocadherin gamma subfamily B, 1
24	UID13	chr18	NM_033591	37753607	37764050	37851679	37967846	+	+100k	+	AS	protocadherin gamma subfamily A, 8
25	UID13	chr18	NM_001159275	37753607	37764050	37763351	37764697	+	+10k	-	AS	mutant ornithine transporter 2
26	UID15	chr18	NM_001004061	50375808	50386206	50403698	50408349	+	+50k	+	AS	family with sequence similarity 170, member A
27	UID19	chr18	NM_001001979	57336493	57346879	57258843	57422835	+	-100k	+	S	MEGF10 protein precursor
28	UID21	chr18	NM_016977	67062625	67075740	66983076	66985841	+	-100k	-	AS	melanocortin 4 receptor
29	UID22	chr18	NM_029019	70632240	70642681	70597913	70626432	+	-50k	+	S	START domain containing protein 6
30	UID22	chr18	NM_172967	70632240	70642681	70578508	70597849	+	-100k	-	AS	hypothetical protein LOC269033 precursor
31	UID22	chr18	NM_010773	70632240	70642681	70693660	70751500	+	+100k	+	AS	methyl-CpG binding domain protein 2
32	UID22	chr18	NM_001136090	70632240	70642681	70634049	70655507	+	+5k	-	AS	DNA polymerase iota isoform 1
33	UID22	chr18	NM_011972	70632240	70642681	70634049	70655690	+	+5k	-	AS	DNA polymerase iota isoform 2
34	UID27	chr18	NM_001109743	76987662	76998098	77060854	77104792	+	+100k	+	AS	functional Smad suppressor element on chromosome
35	UID28	chr18	NM_053099	78856552	78866993	78912458	79271470	+	+100k	-	AS	SET binding protein 1
36	UID30	chr18	NM_026295	80664777	80675218	80570017	80631726	+	-100k	-	AS	CTD (carboxy-terminal domain, RNA polymerase II
37	UID35	chr18	NM_178687	89268102	89278542	89331619	89404520	+	+100k	+	AS	platelet and T cell activation antigen 1 isoform

38	UID35	chr18	NM_001039149	89268102	89278542	89331619	89404520	+	+100k	+	AS	platelet and T cell activation antigen 1 isoform
39	UID37	chr18	NM_018821	89073018	89083416	89002072	89028400	-	-100k	-	AS	suppressor of cytokine signaling 6
40	UID37	chr18	NM_175542	89073018	89083416	89105982	89265207	-	+50k	-	AS	rotatin
41	UID45	chr18	NM_023149	84737021	84747419	84801661	84819826	-	+100k	-	S	CNDP dipeptidase 2
42	UID45	chr18	NM_177450	84737021	84747419	84744701	84784288	-	+10k	-	S	carnosine dipeptidase 1
43	UID46	chr18	NM_178280	81041243	81051726	81128432	81148637	-	+100k	-	S	sal-like protein 3
44	UID47	chr18	NM_145356	76008492	76018936	75945542	76273929	-	-100k	+	AS	zinc finger and BTB domain containing 7C
45	UID50	chr18	NM_008560	68599604	68610050	68532275	68554628	-	-100k	-	AS	melanocortin 2 receptor
46	UID52	chr18	NM_001001803	62744025	62754423	62717782	62721633	-	-50k	-	AS	serine peptidase inhibitor, Kazal type 7
47	UID52	chr18	NM_177829	62744025	62754423	62674279	62786757	-	-100k	+	AS	serine protease inhibitor Kazal type 10
48	UID53	chr18	NM_008313	62410752	62421193	62449572	62593171	-	+50k	+	AS	serotonin 5-HT4 receptor
49	UID54	chr18	NM_001033281	53684849	53695289	53589914	53701226	-	-100k	+	AS	PR domain containing 6
50	UID55	chr18	NM_026108	50656147	50666545	50692840	50693884	-	+50k	-	S	haloacid dehalogenase-like hydrolase domain
51	UID56	chr18	NM_001004061	50386305	50396746	50403698	50408349	-	+20k	+	AS	family with sequence similarity 170, member A
52	UID61	chr18	NM_198117	37156790	37167231	37065178	37313632	-	-100k	+	AS	protocadherin alpha 2
53	UID61	chr18	NM_138662	37156790	37167231	37072180	37313631	-	-100k	+	AS	protocadherin alpha 3
54	UID61	chr18	NM_007766	37156790	37167231	37078662	37313631	-	-100k	+	AS	protocadherin alpha 4 precursor
55	UID61	chr18	NM_009959	37156790	37167231	37086413	37313631	-	-100k	+	AS	protocadherin alpha 5
56	UID61	chr18	NM_007767	37156790	37167231	37093729	37313631	-	-100k	+	AS	protocadherin alpha 6
57	UID61	chr18	NM_009957	37156790	37167231	37099897	37313631	-	-100k	+	AS	protocadherin alpha 7
58	UID61	chr18	NM_201243	37156790	37167231	37118440	37313631	-	-50k	+	AS	protocadherin alpha 8
59	UID61	chr18	NM_138661	37156790	37167231	37123853	37313631	-	-50k	+	AS	protocadherin alpha 9
60	UID61	chr18	NM_009961	37156790	37167231	37131293	37313631	-	-50k	+	AS	protocadherin alpha 10
61	UID61	chr18	NM_138663	37156790	37167231	37146203	37313631	-	-20k	+	AS	protocadherin alpha 12
62	UID61	chr18	NM_009960	37156790	37167231	37136831	37313631	-	-20k	+	AS	protocadherin alpha 11
63	UID61	chr18	NM_001003671	37156790	37167231	37216109	37313631	-	+100k	+	AS	protocadherin alpha subfamily C, 1
64	UID62	chr18	NM_001042768	32185574	32196060	32266135	32281215	-	+100k	-	S	protein C
65	UID62	chr18	NM_001042767	32185574	32196060	32266135	32282580	-	+100k	-	S	protein C
66	UID62	chr18	NM_008934	32185574	32196060	32266135	32281215	-	+100k	-	S	protein C
67	UID62	chr18	NM_032394	32185574	32196060	32102243	32179969	-	-100k	-	AS	myosin VIIB
68	UID62	chr18	NM_173441	32185574	32196060	32210743	32247341	-	+50k	+	AS	IWS1 homolog
69	UID62	chr18	NM_001025381	32185574	32196060	32086023	32092646	-	-100k	-	AS	G protein-coupled receptor 17
70	UID63	chr18	NM_026529	24711884	24722327	24613880	24620777	-	-100k	+	AS	hypothetical protein LOC68046
71	UID63	chr18	NM_021448	24711884	24722327	24746970	24781840	-	+50k	+	AS	signal transducer and activator of transcription
72	UID63	chr18	NM_144861	24711884	24722327	24627971	24673214	-	-100k	-	AS	cDNA sequence BC021395
73	UID63	chr18	NM_139143	24711884	24722327	24722890	24746827	-	+20k	-	S	solute carrier family 39 (metal ion
74	UID63	chr18	NM_026779	24711884	24722327	24796700	24844566	-	+100k	+	AS	molybdenum cofactor sulfurase
75	UID64	chr18	NM_001162942	23930358	23940841	23895342	24036871	-	-50k	+	AS	microtubule-associated protein, RP/EB family
76	UID64	chr18	NM_001162941	23930358	23940841	23896734	24036871	-	-50k	+	AS	microtubule-associated protein, RP/EB family
77	UID64	chr18	NM_153058	23930358	23940841	23946979	24036871	-	+20k	+	AS	microtubule-associated protein, RP/EB family
78	UID75	chr3	NM_008862	7291215	7301656	7349676	7428438	+	+100k	+	AS	protein kinase inhibitor, alpha
79	UID89	chr3	NM_153384	58937494	58947892	58933143	58973141	+	-5k	-	AS	Usher syndrome 3A homolog isoform 1
80	UID89	chr3	NM_153385	58937494	58947892	58933143	58973141	+	-5k	-	AS	Usher syndrome 3A homolog isoform 2

81	UID89	chr3	NM_153386	58937494	58947892	58933143	58973141	+	-5k	-	AS	Usher syndrome 3A homolog isoform 3
82	UID92	chr3	NM_028712	61529543	61539984	61452435	61456632	+	-100k	+	S	RAP2B, member of RAS oncogene family precursor
83	UID94	chr3	NM_001037923	65840901	65851134	65754163	65774108	+	-100k	+	S	hypothetical protein LOC624866
84	UID95	chr3	NM_145820	66156511	66166909	66142756	66384748	+	-20k	-	AS	VEPH isoform A
85	UID95	chr3	NM_028357	66156511	66166909	66142756	66224367	+	-20k	-	AS	VEPH isoform B
86	UID101	chr3	NM_001039195	80825590	80836031	80777418	80888718	+	-50k	-	AS	glutamate receptor, ionotropic, AMPA 2 isoform
87	UID101	chr3	NM_001083806	80825590	80836031	80770862	80888718	+	-100k	-	AS	glutamate receptor, ionotropic, AMPA 2 isoform
88	UID101	chr3	NM_013540	80825590	80836031	80770862	80888718	+	-100k	-	AS	glutamate receptor, ionotropic, AMPA 2 isoform
89	UID102	chr3	NM_025416	94351032	94361473	94427502	94432754	+	+100k	+	AS	thioesterase superfamily member 5
90	UID102	chr3	NM_029431	94351032	94361473	94395535	94417936	+	+50k	+	AS	thioesterase superfamily member 4
91	UID102	chr3	NM_001136117	94351032	94361473	94447847	94449970	+	+100k	+	AS	hypothetical protein LOC271944
92	UID102	chr3	NM_001146107	94351032	94361473	94259815	94263597	+	-100k	-	AS	TD and POZ domain containing-like
93	UID103	chr3	NM_011656	94632343	94642784	94698162	94744210	+	+100k	-	AS	tuftelin 1
94	UID103	chr3	NM_001082484	94632343	94642784	94586083	94668106	+	-50k	-	AS	sorting nexin family member 27 isoform 1
95	UID103	chr3	NM_172434	94632343	94642784	94564234	94577597	+	-100k	+	S	CUG-BP and ETR-3 like factor 3
96	UID103	chr3	NM_029721	94632343	94642784	94582947	94668106	+	-50k	-	AS	sorting nexin family member 27 isoform 2
97	UID103	chr3	NM_025506	94632343	94642784	94550388	94558995	+	-100k	-	AS	RIIa domain-containing protein
98	UID104	chr3	NM_011516	102958973	102969411	102947559	103065161	+	-20k	-	AS	synaptonemal complex protein 1
99	UID104	chr3	NM_009432	102958973	102969411	102906458	102911775	+	-100k	-	AS	thyroid stimulating hormone, beta subunit
100	UID104	chr3	NM_027533	102958973	102969411	102863830	102901353	+	-100k	+	S	tetraspan 2
101	UID105	chr3	NM_027193	115905527	115915968	115880186	115921327	+	-50k	+	S	diphthine synthase
102	UID105	chr3	NM_021388	115905527	115915968	115999452	116021020	+	+100k	+	AS	exostoses-like 2 isoform a
103	UID105	chr3	NM_001163514	115905527	115915968	116000300	116021020	+	+100k	+	AS	exostoses-like 2 isoform a
104	UID105	chr3	NM_023214	115905527	115915968	115937948	115999383	+	+50k	-	AS	zinc transporter like 2
105	UID105	chr3	NM_001163515	115905527	115915968	115999452	116021020	+	+100k	+	AS	exostoses-like 2 isoform b
106	UID105	chr3	NR_015487	115905527	115915968	115873582	115880134	+	-50k	-	AS	
107	UID105	chr3	NR_027894	115905527	115915968	115873582	115880063	+	-50k	-	AS	
108	UID105	chr3	NR_027895	115905527	115915968	115879151	115880124	+	-50k	-	AS	
109	UID110	chr3	NM_021382	134816385	134826826	134766393	134871959	+	-50k	+	S	tachykinin receptor 3
110	UID112	chr3	NM_030601	144763777	144774218	144734469	144756863	+	-50k	-	AS	chloride channel calcium activated 2
111	UID112	chr3	NM_001039222	144763777	144774218	144816710	144833397	+	+100k	-	AS	hypothetical protein LOC622139
112	UID112	chr3	NM_139148	144763777	144774218	144760009	144786688	+	-5k	-	AS	chloride channel calcium activated 4
113	UID112	chr3	NM_009899	144763777	144774218	144667701	144698125	+	-100k	-	AS	chloride channel calcium activated 1
114	UID112	chr3	NM_001033199	144763777	144774218	144848306	144869915	+	+100k	-	AS	calcium activated chloride channel
115	UID117	chr3	NM_001081263	153959825	153970259	153910821	154207013	-	-50k	+	AS	solute carrier family 44, member 5
116	UID118	chr3	NM_133871	151608945	151619386	151668308	151687345	-	+100k	-	S	interferon-induced protein 44
117	UID118	chr3	NM_031367	151608945	151619386	151696122	151700277	-	+100k	-	S	histocompatibility 28
118	UID124	chr3	NM_146139	109739860	109750258	109702062	109813750	-	-50k	+	AS	vav 3 oncogene isoform 2
119	UID127	chr3	NM_011478	92631281	92641679	92542221	92542938	-	-100k	-	AS	small proline-rich protein 3
120	UID127	chr3	NM_009264	92631281	92641679	92569356	92571284	-	-100k	-	AS	small proline-rich protein 1A
121	UID127	chr3	NM_173070	92631281	92641679	92585665	92585896	-	-50k	-	AS	small proline-rich protein 4
122	UID127	chr3	NM_008574	92631281	92641679	92669268	92674427	-	+50k	-	S	sperm mitochondria-associated cysteine-rich
123	UID127	chr3	NM_008412	92631281	92641679	92656304	92659118	-	+50k	-	S	involucrin

124	UID129	chr3	NM_133187	80044402	80054843	79971856	80032204	-	-100k	+	AS	expressed in nerve and epithelium during
125	UID134	chr3	NM_001162884	59481278	59491719	59404663	59432185	-	-100k	-	AS	immunoglobulin superfamily, member 10 precursor
126	UID135	chr3	NM_028808	59366813	59377211	59295824	59298811	-	-100k	-	AS	purinergic receptor P2Y13
127	UID135	chr3	NM_032399	59366813	59377211	59266851	59268014	-	-100k	-	AS	G protein-coupled receptor 87
128	UID135	chr3	NM_027571	59366813	59377211	59304199	59350760	-	-100k	-	AS	purinergic receptor P2Y12
129	UID135	chr3	NM_001162884	59366813	59377211	59404663	59432185	-	+50k	-	S	immunoglobulin superfamily, member 10 precursor
130	UID137	chr3	NM_026225	52997788	53008186	53070051	53105152	-	+100k	-	S	component of oligomeric golgi complex 6
131	UID142	chr3	NM_172679	37037752	37047974	37054654	37244582	-	+20k	+	AS	fragile site-associated protein
132	UID145	chr3	NM_007963	30056212	30066653	30142376	30204277	-	+100k	-	S	MDS1 and EVI1 complex locus isoform 1
133	UID147	chr3	NM_138666	25662948	25673346	25622913	26522982	-	-50k	-	AS	neuroligin 1 isoform 1
134	UID147	chr3	NM_001163387	25662948	25673346	25622913	26344380	-	-50k	-	AS	neuroligin 1 isoform 2
135	UID149	chr3	NM_001081687	16113715	16124158	16140220	16198483	-	+50k	-	S	hypothetical protein LOC381484
136	UID152	chr11	NM_015785	11185074	11195515	11182515	11362411	+	-5k	-	AS	zona pellucida binding protein
137	UID158	chr11	NM_011023	21804003	21814444	21894766	21901654	+	+100k	-	AS	orthodenticle 1
138	UID160	chr11	NM_025923	26323933	26334374	26287083	26371876	+	-50k	+	S	Fanconi anemia, complementation group L
139	UID160	chr11	NM_027260	26323933	26334374	26371401	26493920	+	+50k	-	AS	vaccinia related kinase 2
140	UID161	chr11	NR_002890	26629847	26642710	26685107	26687859	+	+100k	+	AS	
141	UID162	chr11	NM_133767	29335712	29346156	29426456	29445255	+	+100k	+	AS	mitochondrial translational initiation factor 2
142	UID162	chr11	NM_176841	29335712	29346156	29273774	29410811	+	-100k	+	S	coiled coil domain containing 88A
143	UID162	chr11	NM_001163454	29335712	29346156	29412876	29415033	+	+100k	-	AS	PrdX-deacylase domain 1 isoform 1
144	UID162	chr11	NM_026465	29335712	29346156	29413054	29415033	+	+100k	-	AS	PrdX-deacylase domain 1 isoform 2
145	UID167	chr11	NM_013552	40474329	40484770	40544810	40576860	+	+100k	-	AS	hyaluronan mediated motility receptor (RHAMM)
146	UID167	chr11	NM_134017	40474329	40484770	40522736	40536036	+	+50k	-	AS	methionine adenosyltransferase II, beta
147	UID168	chr11	NM_008073	41729980	41740466	41755279	41844101	+	+50k	-	AS	gamma-aminobutyric acid (GABA) A receptor,
148	UID168	chr11	NM_177408	41729980	41740466	41753617	41843742	+	+50k	-	AS	gamma-aminobutyric acid (GABA) A receptor,
149	UID172	chr11	NM_001045520	45611028	45621469	45695386	45754048	+	+100k	+	AS	clathrin interactor 1
150	UID175	chr11	NM_146471	49183485	49193919	49123572	49124508	+	-100k	+	S	olfactory receptor 1393
151	UID175	chr11	NM_146470	49183485	49193919	49136745	49137681	+	-50k	+	S	olfactory receptor 1392
152	UID175	chr11	NM_206822	49183485	49193919	49160970	49161906	+	-50k	+	S	olfactory receptor 10
153	UID175	chr11	NM_146468	49183485	49193919	49170835	49171771	+	-20k	+	S	olfactory receptor 1391
154	UID175	chr11	NM_147065	49183485	49193919	49183956	49184892	+	+5k	+	AS	olfactory receptor 1390
155	UID175	chr11	NM_147066	49183485	49193919	49273900	49274836	+	+100k	+	AS	olfactory receptor 1389
156	UID175	chr11	NM_010794	49183485	49193919	49087613	49106447	+	-100k	+	S	mannoside acetylglucosaminyltransferase 1
157	UID175	chr11	NM_001110148	49183485	49193919	49087613	49106447	+	-100k	+	S	mannoside acetylglucosaminyltransferase 1
158	UID175	chr11	NM_001110150	49183485	49193919	49093974	49106447	+	-100k	+	S	mannoside acetylglucosaminyltransferase 1
159	UID175	chr11	NM_001110149	49183485	49193919	49090899	49106447	+	-100k	+	S	mannoside acetylglucosaminyltransferase 1
160	UID183	chr11	NM_001011863	74120033	74130474	74085585	74086557	+	-50k	+	S	olfactory receptor 406
161	UID183	chr11	NM_146707	74120033	74130474	74150476	74151424	+	+50k	-	AS	olfactory receptor 410
162	UID183	chr11	NM_146709	74120033	74130474	74162844	74163777	+	+50k	-	AS	olfactory receptor 411
163	UID183	chr11	NM_001011851	74120033	74130474	74180865	74181804	+	+100k	+	AS	olfactory receptor 412
164	UID183	chr11	NM_146711	74120033	74130474	74022392	74023484	+	-100k	-	AS	olfactory receptor 43
165	UID183	chr11	NM_011002	74120033	74130474	74100003	74105841	+	-50k	+	S	olfactory receptor 59
166	UID183	chr11	NM_001015046	74120033	74130474	74199677	74406353	+	+100k	-	AS	RAP1 GTPase activating protein 2

167	UID185	chr11	NM_026433	89773707	89784148	89846437	89852595	+	+100k	+	AS	transmembrane protein 100
168	UID185	chr11	NM_008796	89773707	89784148	89799506	89818984	+	+50k	-	AS	phosphatidylcholine transfer protein
169	UID190	chr11	NM_010858	104464304	104474702	104366752	104403309	-	-100k	+	AS	myosin, light polypeptide 4
170	UID190	chr11	NM_016780	104464304	104474702	104424089	104486561	-	-50k	+	AS	integrin beta 3 precursor
171	UID191	chr11	NM_001100614	99697964	99708363	99631065	99631756	-	-100k	-	AS	hypothetical protein LOC670496
172	UID191	chr11	NM_027568	99697964	99708363	99724009	99724980	-	+50k	+	AS	keratin associated protein 31-1
173	UID191	chr11	NM_015741	99697964	99708363	99689529	99690090	-	-10k	+	AS	keratin associated protein 9-1
174	UID191	chr11	NM_001101613	99697964	99708363	99695276	99696319	-	-5k	+	AS	hypothetical protein LOC670533
175	UID191	chr11	NM_027087	99697964	99708363	99614162	99620536	-	-100k	-	AS	keratin associated protein 4-13
176	UID191	chr11	NM_001025244	99697964	99708363	99752380	99753315	-	+100k	+	AS	keratin associated protein 31-2
177	UID191	chr11	NM_001099313	99697964	99708363	99614275	99625982	-	-100k	-	AS	keratin associated protein 4 family member
178	UID191	chr11	NM_001099313	99697964	99708363	99619759	99620536	-	-100k	-	AS	keratin associated protein 4 family member
179	UID191	chr11	NM_027087	99697964	99708363	99625167	99625982	-	-100k	-	AS	keratin associated protein 4-13
180	UID191	chr11	NM_001085548	99697964	99708363	99601289	99602347	-	-100k	+	AS	keratin associated protein 4 family member
181	UID191	chr11	NM_001099312	99697964	99708363	99619637	99620536	-	-100k	-	AS	keratin associated protein 4 family member
182	UID191	chr11	NM_001099311	99697964	99708363	99608764	99609382	-	-100k	-	AS	keratin associated protein 4 family member
183	UID191	chr11	NM_001085527	99697964	99708363	99764564	99765641	-	+100k	+	AS	keratin associated protein 9-5
184	UID191	chr11	NM_001013823	99697964	99708363	99666744	99667695	-	-50k	-	AS	keratin associated protein 4-16
185	UID191	chr11	NM_001126323	99697964	99708363	99730840	99731761	-	+50k	+	AS	hypothetical protein LOC670550
186	UID192	chr11	NM_028547	91451985	91462382	91391375	91393645	-	-100k	-	AS	kinesin family member 2B
187	UID193	chr11	NM_199008	90394219	90404660	90454273	90462067	-	+100k	+	AS	COX11 homolog, cytochrome c oxidase assembly
188	UID193	chr11	NM_028011	90394219	90404660	90461780	90503691	-	+100k	-	S	target of myb1-like 1
189	UID194	chr11	NM_008796	89719144	89729585	89799506	89818984	-	+100k	-	S	phosphatidylcholine transfer protein
190	UID195	chr11	NM_146443	73425952	73436350	73332453	73333392	-	-100k	-	AS	olfactory receptor 382
191	UID195	chr11	NM_147023	73425952	73436350	73404992	73405931	-	-50k	-	AS	olfactory receptor 385
192	UID195	chr11	NM_207224	73425952	73436350	73418776	73419715	-	-10k	+	AS	olfactory receptor 386
193	UID195	chr11	NM_001126489	73425952	73436350	73504972	73530002	-	+100k	+	AS	zinc finger protein 735
194	UID197	chr11	NM_025496	62783523	62793921	62767387	62809290	-	-20k	+	AS	CMT1A duplicated region transcript 4
195	UID197	chr11	NM_026210	62783523	62793921	62695684	62711379	-	-100k	+	AS	hypothetical protein LOC67510
196	UID197	chr11	NM_027660	62783523	62793921	62877853	62911155	-	+100k	+	AS	tektin 3
197	UID198	chr11	NM_001083884	58284135	58294515	58195226	58206736	-	-100k	+	AS	RIKEN cDNA 2210415F13 precursor
198	UID198	chr11	NM_027339	58284135	58294515	58195226	58206736	-	-100k	+	AS	RIKEN cDNA 2210415F13 precursor
199	UID198	chr11	NM_027239	58284135	58294515	58237305	58242218	-	-50k	+	AS	hypothetical protein LOC69864
200	UID198	chr11	NM_207527	58284135	58294515	58262343	58269118	-	-50k	-	AS	hypothetical protein LOC403200
201	UID198	chr11	NM_146878	58284135	58294515	58271194	58272142	-	-20k	-	AS	olfactory receptor 30
202	UID198	chr11	NM_001011770	58284135	58294515	58305943	58306948	-	+50k	-	S	olfactory receptor 332
203	UID198	chr11	NM_001011861	58284135	58294515	58317792	58318749	-	+50k	-	S	olfactory receptor 331
204	UID198	chr11	NM_146879	58284135	58294515	58345231	58346179	-	+100k	-	S	olfactory receptor 330
205	UID198	chr11	NM_001011531	58284135	58294515	58358712	58359651	-	+100k	-	S	olfactory receptor 329
206	UID198	chr11	NM_146502	58284135	58294515	58367499	58368432	-	+100k	-	S	olfactory receptor 328
207	UID198	chr11	NM_001045542	58284135	58294515	58248753	58257817	-	-50k	+	AS	hypothetical protein LOC624860
208	UID203	chr11	NM_173753	54223832	54234273	54281611	54361659	-	+100k	+	AS	folliculin interacting protein 1
209	UID203	chr11	NM_029105	54223832	54234273	54214074	54270178	-	-10k	+	AS	hypothetical protein LOC74847

210	UID203	chr11	NM_144823	54223832	54234273	54147626	54204962	-	-100k	+	AS	acyl-CoA synthetase long-chain family member 6
211	UID203	chr11	NM_001033597	54223832	54234273	54147626	54204962	-	-100k	+	AS	acyl-CoA synthetase long-chain family member 6
212	UID203	chr11	NM_001033598	54223832	54234273	54147246	54204962	-	-100k	+	AS	acyl-CoA synthetase long-chain family member 6
213	UID203	chr11	NM_001033599	54223832	54234273	54158325	54204962	-	-100k	+	AS	acyl-CoA synthetase long-chain family member 6
214	UID204	chr11	NM_013744	50860637	50871045	50765208	50775058	-	-100k	-	AS	zinc finger protein 354B
215	UID204	chr11	NM_146910	50860637	50871045	50812442	50813390	-	-50k	+	AS	olfactory receptor 1378
216	UID204	chr11	NM_146911	50860637	50871045	50828125	50829049	-	-50k	+	AS	olfactory receptor 1377
217	UID204	chr11	NM_146909	50860637	50871045	50850396	50851320	-	-20k	+	AS	olfactory receptor 51
218	UID204	chr11	NM_010997	50860637	50871045	50870426	50871368	-	+10k	+	AS	olfactory receptor 54
219	UID204	chr11	NM_009329	50860637	50871045	50902679	50916222	-	+50k	+	AS	zinc finger protein 354A
220	UID204	chr11	NM_008936	50860637	50871045	50794228	50797055	-	-100k	-	AS	paired like homeodomain factor 1
221	UID205	chr11	NM_001163672	49747832	49757864	49690173	49729844	-	-100k	+	AS	mitogen activated protein kinase 9 isoform
222	UID205	chr11	NM_029004	49747832	49757864	49745257	49823646	-	-5k	+	AS	RasGEF domain family, member 1C
223	UID205	chr11	NM_016961	49747832	49757864	49690173	49729844	-	-100k	+	AS	mitogen activated protein kinase 9 isoform
224	UID205	chr11	NM_207692	49747832	49757864	49690173	49729844	-	-100k	+	AS	mitogen activated protein kinase 9 isoform
225	UID205	chr11	NM_001163671	49747832	49757864	49690173	49729844	-	-100k	+	AS	mitogen activated protein kinase 9 isoform
226	UID206	chr11	NM_001161356	46602189	46612630	46512382	46533780	-	-100k	-	AS	T-cell immunoglobulin and mucin domain
227	UID206	chr11	NM_001161355	46602189	46612630	46512382	46542253	-	-100k	-	AS	T-cell immunoglobulin and mucin domain
228	UID206	chr11	NM_178759	46602189	46612630	46654221	46687756	-	+100k	+	AS	T-cell immunoglobulin and mucin domain
229	UID206	chr11	NM_134248	46602189	46612630	46594599	46622036	-	-10k	+	AS	hepatitis A virus cellular receptor 1 precursor
230	UID206	chr11	NM_134249	46602189	46612630	46512382	46550527	-	-100k	-	AS	T-cell immunoglobulin and mucin domain
231	UID208	chr11	NM_008073	41720465	41730906	41755279	41844101	-	+50k	-	S	gamma-aminobutyric acid (GABA) A receptor,
232	UID208	chr11	NM_177408	41720465	41730906	41753617	41843742	-	+50k	-	S	gamma-aminobutyric acid (GABA) A receptor,
233	UID209	chr11	NM_009831	40681174	40691572	40591974	40598709	-	-100k	-	AS	cyclin G1
234	UID210	chr11	NM_026023	40646544	40657030	40577064	40583469	-	-100k	+	AS	NudC domain containing 2
235	UID210	chr11	NM_009831	40646544	40657030	40591974	40598709	-	-100k	-	AS	cyclin G1
236	UID214	chr11	NM_176841	29224874	29235360	29273774	29410811	-	+50k	+	AS	coiled coil domain containing 88A
237	UID215	chr11	NM_181577	28246392	28256833	28288814	28484296	-	+50k	-	S	coiled-coil domain containing 85A
238	UID219	chr11	NM_009044	23733755	23744196	23641728	23670970	-	-100k	-	AS	reticuloendotheliosis oncogene
239	UID219	chr11	NM_172555	23733755	23744196	23762646	23795270	-	+50k	-	S	poly(A) polymerase gamma
240	UID223	chr11	NM_207655	16587902	16598299	16652205	16813910	-	+100k	+	AS	epidermal growth factor receptor isoform 1
241	UID223	chr11	NM_007912	16587902	16598299	16652205	16787661	-	+100k	+	AS	epidermal growth factor receptor isoform 2
242	UID225	chr11	NM_172496	12038497	12048894	12136678	12364963	-	+100k	-	S	cordon-bleu protein
243	UID228	chr2	NR_027890	6754503	6764944	6839973	6845994	+	+100k	-	AS	
244	UID232	chr2	NM_008859	11036920	11047361	11090234	11219079	+	+100k	+	AS	protein kinase C, theta
245	UID233	chr2	NM_011701	13573292	13583733	13492163	13500679	+	-100k	+	S	vimentin
246	UID233	chr2	NM_145838	13573292	13583733	13572790	13711274	+	-5k	-	AS	sialyltransferase 8 F
247	UID237	chr2	NM_001001297	21161384	21171617	21123477	21132763	+	-50k	+	S	threonine synthase-like 1 isoform b
248	UID237	chr2	NM_177588	21161384	21171617	21123477	21132763	+	-50k	+	S	threonine synthase-like 1 isoform a
249	UID237	chr2	NM_027728	21161384	21171617	21098484	21123119	+	-100k	-	AS	enkurin
250	UID239	chr2	NM_080462	23758958	23769399	23824921	23871388	+	+100k	-	AS	histamine N-methyltransferase
251	UID240	chr2	NM_080462	23764451	23774892	23824921	23871388	+	+100k	-	AS	histamine N-methyltransferase
252	UID241	chr2	NM_080462	23769945	23779785	23824921	23871388	+	+100k	-	AS	histamine N-methyltransferase

253	UID242	chr2	NM_146622	36927581	36938022	36890315	36891269	+	-50k	+	S	olfactory receptor 360
254	UID242	chr2	NM_146368	36927581	36938022	36906786	36907755	+	-50k	-	AS	olfactory receptor 361
255	UID242	chr2	NM_147051	36927581	36938022	36926703	36927657	+	-5k	-	AS	olfactory receptor 362
256	UID242	chr2	NM_146662	36927581	36938022	37023251	37024190	+	+100k	+	AS	olfactory receptor 365
257	UID246	chr2	NM_015753	44755033	44765519	44805642	44935288	+	+100k	-	AS	zinc finger homeobox 1b isoform 2
258	UID249	chr2	NM_173030	54197901	54208342	54251772	54933130	+	+100k	+	AS	UDP-N-acetyl-alpha-D-galactosamine:polypeptide
259	UID252	chr2	NM_008426	55304291	55314732	55252541	55410911	+	-100k	+	S	potassium inwardly-rectifying channel, subfamily
260	UID255	chr2	NM_0011111030	58069146	58079544	58082838	58173144	+	+20k	-	AS	activin A receptor, type IC isoform 1
261	UID255	chr2	NM_001033369	58069146	58079544	58082838	58140193	+	+20k	-	AS	activin A receptor, type IC isoform 2
262	UID259	chr2	NM_153409	65572926	65583367	65646605	65824323	+	+100k	+	AS	cysteine-serine-rich nuclear protein 3
263	UID259	chr2	NM_178634	65572926	65583367	65646605	65824323	+	+100k	+	AS	cysteine-serine-rich nuclear protein 3
264	UID260	chr2	NM_172856	68568187	68578628	68662395	68912129	+	+100k	+	AS	LAG1 homolog, ceramide synthase 6
265	UID265	chr2	NM_024181	80049187	80059628	80116304	80154894	+	+100k	+	AS	DnaJ (Hsp40) homolog, subfamily C, member 10
266	UID265	chr2	NM_177256	80049187	80059628	80093310	80096195	+	+50k	+	AS	peroxiredoxin 5 related sequence 1 protein
267	UID268	chr2	NM_146847	86640979	86651377	86554633	86555575	+	-100k	-	AS	olfactory receptor 1090
268	UID268	chr2	NM_146366	86640979	86651377	86586570	86587539	+	-100k	+	S	olfactory receptor 1093
269	UID268	chr2	NM_181818	86640979	86651377	86606859	86607836	+	-50k	-	AS	olfactory receptor 141
270	UID268	chr2	NM_146365	86640979	86651377	86629592	86630585	+	-20k	+	S	olfactory receptor 1094
271	UID268	chr2	NM_146730	86640979	86651377	86651608	86652535	+	+20k	-	AS	olfactory receptor 1095
272	UID268	chr2	NM_146843	86640979	86651377	86691064	86692012	+	+100k	-	AS	olfactory receptor 1097
273	UID268	chr2	NM_146845	86640979	86651377	86723421	86724369	+	+100k	-	AS	olfactory receptor 1098
274	UID269	chr2	NM_146294	88039049	88049493	87949905	87950856	+	-100k	-	AS	olfactory receptor 1167
275	UID269	chr2	NM_146531	88039049	88049493	87985717	87986656	+	-100k	+	S	olfactory receptor 1168
276	UID269	chr2	NM_146532	88039049	88049493	88024918	88025869	+	-20k	-	AS	olfactory receptor 1170
277	UID269	chr2	NM_207566	88039049	88049493	88074947	88075886	+	+50k	-	AS	olfactory receptor 1173
278	UID270	chr2	NM_021368	89885795	89896236	89821976	89822903	+	-100k	-	AS	olfactory receptor 1264
279	UID270	chr2	NM_020515	89885795	89896236	89852252	89853161	+	-50k	-	AS	olfactory receptor 140
280	UID270	chr2	NM_146474	89885795	89896236	89794233	89795154	+	-100k	+	S	olfactory receptor 1261
281	UID270	chr2	NM_146974	89885795	89896236	89803246	89804161	+	-100k	+	S	olfactory receptor 1262
282	UID270	chr2	NM_146794	89885795	89896236	89815770	89816691	+	-100k	+	S	olfactory receptor 1263
283	UID270	chr2	NM_146343	89885795	89896236	89837759	89838689	+	-50k	+	S	olfactory receptor 1265
284	UID270	chr2	NM_146342	89885795	89896236	89919505	89920435	+	+50k	-	AS	olfactory receptor 1269
285	UID270	chr2	NM_010980	89885795	89896236	89939049	89939976	+	+100k	-	AS	olfactory receptor 32
286	UID270	chr2	NM_146985	89885795	89896236	89949928	89950843	+	+100k	-	AS	olfactory receptor 1270
287	UID271	chr2	NM_146263	90171336	90181777	90201501	90202431	+	+50k	+	AS	olfactory receptor 1274
288	UID271	chr2	NM_146980	90171336	90181777	90082485	90083412	+	-100k	-	AS	olfactory receptor 1272
289	UID271	chr2	NM_146975	90171336	90181777	90096774	90097698	+	-100k	-	AS	olfactory receptor 1273
290	UID271	chr2	NM_146265	90171336	90181777	90125035	90125965	+	-50k	+	S	olfactory receptor 1506
291	UID271	chr2	NM_008982	90171336	90181777	90233728	90381486	+	+100k	-	AS	protein tyrosine phosphatase, receptor type, J
292	UID271	chr2	NM_001135657	90171336	90181777	90230594	90280013	+	+100k	-	AS	protein tyrosine phosphatase, receptor type, J
293	UID276	chr2	NM_026592	101279367	101289808	101361619	101429825	+	+100k	-	AS	hypothetical protein LOC68170
294	UID277	chr2	NM_028260	105656743	105666975	105705476	105766397	+	+50k	+	AS	IMP1 inner mitochondrial membrane
295	UID279	chr2	NM_026613	109902431	109912663	109818655	109846162	+	-100k	+	S	coiled-coil domain containing 34

296	UID280	chr2	NM_130452	110035030	110045471	110065921	110106564	+	+50k	-	AS	gamma-butyrobetaine dioxygenase
297	UID281	chr2	NM_001003915	110343277	110353718	110398136	110448608	+	+100k	+	AS	solute carrier family 5 (sodium/glucose
298	UID282	chr2	NM_025675	114185997	114196438	114207858	114346369	+	+50k	-	AS	ATP binding domain 4
299	UID285	chr2	NM_001004174	122332210	122342651	122329327	122332517	+	-5k	+	S	normal mucosa of esophagus specific 1
300	UID285	chr2	NM_019788	122332210	122342651	122429945	122440928	+	+100k	+	AS	pallidin
301	UID285	chr2	NM_025961	122332210	122342651	122285913	122302718	+	-50k	-	AS	L-arginine:glycine amidinotransferase precursor
302	UID285	chr2	NM_011774	122332210	122342651	122372679	122394104	+	+50k	-	AS	solute carrier family 30 (zinc transporter),
303	UID291	chr2	NM_009378	148149069	148159512	148095911	148099629	+	-100k	-	AS	thrombomodulin precursor
304	UID291	chr2	NM_010740	148149069	148159512	148128091	148134976	+	-50k	-	AS	CD93 antigen
305	UID291	chr2	NM_009219	148149069	148159512	148086817	148088205	+	-100k	+	S	somatostatin receptor 4
306	UID293	chr2	NM_175631	171696111	171706552	171727540	171734671	+	+50k	-	AS	cerebellin 4 precursor
307	UID294	chr2	NM_001034900	150129373	150139814	150162431	150176504	+	+50k	-	AS	zinc finger protein 345
308	UID295	chr2	NM_008953	153776377	153786818	153699716	153707514	+	-100k	+	S	parotid secretory protein precursor
309	UID295	chr2	NM_028528	153776377	153786818	153821787	153829796	+	+50k	+	AS	Splunc3
310	UID295	chr2	NM_011126	153776377	153786818	153834320	153840657	+	+100k	+	AS	palate, lung, and nasal epithelium clone
311	UID295	chr2	NM_025990	153776377	153786818	153854048	153859884	+	+100k	+	AS	RIKEN cDNA 2310021H06 precursor
312	UID303	chr2	NM_175631	171696111	171706552	171727540	171734671	+	+50k	-	AS	cerebellin 4 precursor
313	UID304	chr2	NM_009236	181668181	181678579	181599242	181601046	-	-100k	-	AS	SRY-box containing gene 18
314	UID304	chr2	NM_009326	181668181	181678579	181609715	181617457	-	-100k	+	AS	transcription elongation factor A protein 2
315	UID304	chr2	NM_008665	181668181	181678579	181696447	181757174	-	+50k	+	AS	myelin transcription factor 1
316	UID304	chr2	NM_011012	181668181	181678579	181644449	181650378	-	-50k	+	AS	opioid receptor-like 1
317	UID304	chr2	NM_026446	181668181	181678579	181617828	181623330	-	-100k	-	AS	regulator of G-protein signaling 19
318	UID304	chr2	NM_199023	181668181	181678579	181626200	181627848	-	-50k	-	AS	hypothetical protein LOC277496
319	UID304	chr2	NM_153594	181668181	181678579	181767308	181786856	-	+100k	+	AS	protein-L-isoaspartate (D-aspartate)
320	UID305	chr2	NM_177191	178370657	178381091	178274703	178337066	-	-100k	-	AS	synaptonemal complex protein 2
321	UID305	chr2	NM_001081289	178370657	178381091	178343941	178351569	-	-50k	+	AS	hypothetical protein LOC71532
322	UID305	chr2	NM_198656	178370657	178381091	178360014	178416774	-	-20k	+	AS	cadherin-like 26 precursor
323	UID305	chr2	NM_001085501	178370657	178381091	178340613	178343880	-	-50k	-	AS	protein phosphatase 1, regulatory subunit 3D
324	UID306	chr2	NM_053195	144926715	144937147	144934051	145333380	-	+10k	+	AS	solute carrier family 24
325	UID308	chr2	NM_178382	140423731	140434129	140349641	140362910	-	-100k	-	AS	fibronectin leucine rich transmembrane protein
326	UID312	chr2	NM_028201	136554143	136564626	136582658	136761090	-	+50k	+	AS	hypothetical protein LOC74243 isoform 2
327	UID312	chr2	NM_028834	136554143	136564626	136583703	136759834	-	+50k	+	AS	hypothetical protein LOC74243 isoform 1
328	UID312	chr2	NM_001038641	136554143	136564626	136590791	136761219	-	+50k	+	AS	hypothetical protein LOC74243 isoform 1
329	UID312	chr2	NM_021527	136554143	136564626	136565220	136582847	-	+20k	-	S	McKusick-Kaufman syndrome protein
330	UID312	chr2	NM_001141946	136554143	136564626	136565220	136582847	-	+20k	-	S	McKusick-Kaufman syndrome protein
331	UID322	chr2	NM_026271	110228876	110239317	110161763	110163832	-	-100k	-	AS	fin bud initiation factor homolog precursor
332	UID324	chr2	NM_001048141	109429182	109439580	109493274	109527882	-	+100k	+	AS	brain-derived neurotrophic factor isoform 2
333	UID324	chr2	NM_007540	109429182	109439580	109475538	109527882	-	+50k	+	AS	brain-derived neurotrophic factor isoform 1
334	UID324	chr2	NM_001048142	109429182	109439580	109494401	109527882	-	+100k	+	AS	brain-derived neurotrophic factor isoform 2
335	UID324	chr2	NM_001048139	109429182	109439580	109476735	109527882	-	+50k	+	AS	brain-derived neurotrophic factor isoform 2
336	UID325	chr2	NM_029790	108897617	108908013	108893138	109079129	-	-5k	-	AS	methyltransferase 5 domain containing 1
337	UID328	chr2	NM_008045	106933914	106944312	106856979	106860490	-	-100k	-	AS	follicle stimulating hormone beta precursor
338	UID329	chr2	NM_008045	106900694	106911092	106856979	106860490	-	-50k	-	AS	follicle stimulating hormone beta precursor



339	UID330	chr2	NM_0011111060	103809041	103819482	103896639	103916190	-	+100k	+	AS	CD59a antigen precursor
340	UID330	chr2	NM_181858	103809041	103819482	103871848	103885796	-	+100k	+	AS	CD59b antigen precursor
341	UID330	chr2	NM_008505	103809041	103819482	103771125	103782716	-	-50k	+	AS	LIM domain only 2 isoform 1
342	UID330	chr2	NM_020593	103809041	103819482	103828637	103855966	-	+20k	+	AS	F-box only protein 3 isoform 2
343	UID330	chr2	NM_212433	103809041	103819482	103828637	103864076	-	+20k	+	AS	F-box only protein 3 isoform 1
344	UID330	chr2	NM_007652	103809041	103819482	103896639	103916190	-	+100k	+	AS	CD59a antigen precursor
345	UID330	chr2	NM_001142336	103809041	103819482	103770395	103782716	-	-50k	+	AS	LIM domain only 2 isoform 3
346	UID330	chr2	NM_001142335	103809041	103819482	103771125	103782716	-	-50k	+	AS	LIM domain only 2 isoform 2
347	UID330	chr2	NM_001142337	103809041	103819482	103758833	103782716	-	-100k	+	AS	LIM domain only 2 isoform 3
348	UID339	chr2	NM_146985	90042544	90052985	89949928	89950843	-	-100k	-	AS	olfactory receptor 1270
349	UID339	chr2	NM_146265	90042544	90052985	90022405	90023335	-	-50k	-	AS	olfactory receptor 1506
350	UID339	chr2	NM_146984	90042544	90052985	90052907	90053825	-	+20k	-	S	olfactory receptor 142
351	UID339	chr2	NM_146793	90042544	90052985	90066349	90067267	-	+50k	-	S	olfactory receptor 1271
352	UID339	chr2	NM_146980	90042544	90052985	90082485	90083412	-	+50k	-	S	olfactory receptor 1272
353	UID339	chr2	NM_146975	90042544	90052985	90096774	90097698	-	+100k	-	S	olfactory receptor 1273
354	UID339	chr2	NM_146265	90042544	90052985	90125035	90125965	-	+100k	+	AS	olfactory receptor 1506
355	UID340	chr2	NM_146342	89966593	89977034	89919505	89920435	-	-50k	-	AS	olfactory receptor 1269
356	UID340	chr2	NM_010980	89966593	89977034	89939049	89939976	-	-50k	-	AS	olfactory receptor 32
357	UID340	chr2	NM_146985	89966593	89977034	89949928	89950843	-	-20k	-	AS	olfactory receptor 1270
358	UID340	chr2	NM_146265	89966593	89977034	90022405	90023335	-	+100k	-	S	olfactory receptor 1506
359	UID340	chr2	NM_146984	89966593	89977034	90052907	90053825	-	+100k	-	S	olfactory receptor 142
360	UID340	chr2	NM_146793	89966593	89977034	90066349	90067267	-	+100k	-	S	olfactory receptor 1271
361	UID341	chr2	NM_146977	89692920	89703364	89617166	89618099	-	-100k	+	AS	olfactory receptor 1255
362	UID341	chr2	NM_146983	89692920	89703364	89635861	89636782	-	-100k	-	AS	olfactory receptor 1256
363	UID341	chr2	NM_010990	89692920	89703364	89644904	89645810	-	-50k	-	AS	olfactory receptor 48
364	UID341	chr2	NM_146982	89692920	89703364	89681666	89682596	-	-20k	+	AS	olfactory receptor 1257
365	UID341	chr2	NM_146978	89692920	89703364	89730649	89731585	-	+50k	+	AS	olfactory receptor 1258
366	UID341	chr2	NM_146341	89692920	89703364	89744022	89744952	-	+100k	-	S	olfactory receptor 1259
367	UID341	chr2	NM_146981	89692920	89703364	89778618	89779551	-	+100k	+	AS	olfactory receptor 1260
368	UID342	chr2	NM_0010111517	88504897	88515338	88478695	88479652	-	-50k	+	AS	olfactory receptor 1193
369	UID342	chr2	NM_146753	88504897	88515338	88483642	88484569	-	-50k	-	AS	olfactory receptor 1195
370	UID342	chr2	NM_146464	88504897	88515338	88501221	88502166	-	-5k	-	AS	olfactory receptor 1196
371	UID342	chr2	NM_001005225	88504897	88515338	88529491	88530436	-	+50k	-	S	olfactory receptor 1197
372	UID342	chr2	NM_207567	88504897	88515338	88546798	88547725	-	+50k	-	S	olfactory receptor 1198
373	UID342	chr2	NM_146458	88504897	88515338	88556579	88557512	-	+100k	-	S	olfactory receptor 1199
374	UID342	chr2	NM_001005227	88504897	88515338	88568141	88569152	-	+100k	-	S	olfactory receptor 1200
375	UID342	chr2	NM_146895	88504897	88515338	88595222	88596146	-	+100k	+	AS	olfactory receptor 1201
376	UID343	chr2	NM_146772	88463997	88474438	88392644	88393565	-	-100k	+	AS	olfactory receptor 1189
377	UID343	chr2	NM_0010111517	88463997	88474438	88478695	88479652	-	+20k	+	AS	olfactory receptor 1193
378	UID343	chr2	NM_146753	88463997	88474438	88483642	88484569	-	+20k	-	S	olfactory receptor 1195
379	UID343	chr2	NM_146464	88463997	88474438	88501221	88502166	-	+50k	-	S	olfactory receptor 1196
380	UID343	chr2	NM_001005225	88463997	88474438	88529491	88530436	-	+100k	-	S	olfactory receptor 1197
381	UID343	chr2	NM_207567	88463997	88474438	88546798	88547725	-	+100k	-	S	olfactory receptor 1198

382	UID343	chr2	NM_146458	88463997	88474438	88556579	88557512	-	+100k	-	S	olfactory receptor 1199
383	UID344	chr2	NM_001011785	85094053	85104536	85131805	85132735	-	+50k	-	S	olfactory receptor 987
384	UID344	chr2	NM_001011534	85094053	85104536	85153833	85154763	-	+100k	-	S	olfactory receptor 988
385	UID345	chr2	NM_145526	84878368	84888851	84797390	84836673	-	-100k	-	AS	purinergic receptor P2X3
386	UID345	chr2	NM_008920	84878368	84888851	84781299	84784471	-	-100k	+	AS	proteoglycan 2, bone marrow precursor
387	UID345	chr2	NM_016914	84878368	84888851	84789053	84794725	-	-100k	+	AS	proteoglycan 3 precursor
388	UID345	chr2	NM_011784	84878368	84888851	84937198	84940761	-	+100k	+	AS	apelin receptor
389	UID345	chr2	NM_182990	84878368	84888851	84838039	84847950	-	-50k	+	AS	structure specific recognition protein 1 isoform
390	UID345	chr2	NM_001081260	84878368	84888851	84851298	84873887	-	-50k	+	AS	tankyrase 1 binding protein 1
391	UID345	chr2	NM_001136081	84878368	84888851	84838289	84847945	-	-50k	+	AS	structure specific recognition protein 1 isoform
392	UID346	chr2	NM_175514	83686760	83697154	83613566	83682197	-	-100k	+	AS	family with sequence similarity 171, member B
393	UID346	chr2	NM_027964	83686760	83697154	83715917	83742065	-	+50k	-	S	zinc finger, SWIM domain containing 2
394	UID353	chr2	NM_177843	77940007	77950405	78038385	78103069	-	+100k	+	AS	hypothetical protein LOC329436
395	UID354	chr2	NM_001033477	66883411	66893897	66974672	66987051	-	+100k	+	AS	hypothetical protein LOC383709
396	UID360	chr2	NM_029692	58499883	58510324	58570570	58606054	-	+100k	+	AS	uridine phosphorylase 2
397	UID368	chr2	NM_172663	49296330	49306771	49273494	49373618	-	-50k	+	AS	enhancer of polycomb homolog 2
398	UID381	chr2	NM_024209	39061532	39071973	39018806	39048347	-	-50k	-	AS	protein phosphatase 6, catalytic subunit
399	UID382	chr2	NM_146951	36363814	36374212	36274595	36275534	-	-100k	+	AS	olfactory receptor 340
400	UID382	chr2	NM_146950	36363814	36374212	36301195	36302137	-	-100k	-	AS	olfactory receptor 341
401	UID382	chr2	NM_146948	36363814	36374212	36349422	36350361	-	-20k	+	AS	olfactory receptor 342
402	UID382	chr2	NM_146628	36363814	36374212	36390608	36391538	-	+50k	+	AS	olfactory receptor 344
403	UID382	chr2	NM_146945	36363814	36374212	36462049	36462985	-	+100k	+	AS	olfactory receptor 345
404	UID383	chr2	NM_146947	36258293	36268691	36198786	36199707	-	-100k	+	AS	olfactory receptor 338
405	UID383	chr2	NM_146949	36258293	36268691	36243408	36244338	-	-20k	+	AS	olfactory receptor 339
406	UID383	chr2	NM_146951	36258293	36268691	36274595	36275534	-	+20k	+	AS	olfactory receptor 340
407	UID383	chr2	NM_146950	36258293	36268691	36301195	36302137	-	+50k	-	S	olfactory receptor 341
408	UID383	chr2	NM_146948	36258293	36268691	36349422	36350361	-	+100k	+	AS	olfactory receptor 342
409	UID384	chr2	NM_026896	29119327	29129768	29168844	29346797	-	+50k	+	AS	transcriptional co-activator CRSP8 homolog
410	UID385	chr2	NM_148413	22075192	22085636	22158821	22469894	-	+100k	+	AS	myosin IIIA
411	UID391	chr2	NM_026162	16348513	16358954	16274075	16669869	-	-100k	+	AS	plexin domain containing 2 precursor
412	UID392	chr2	NM_026162	16291976	16302417	16274075	16669869	-	-20k	+	AS	plexin domain containing 2 precursor
413	UID394	chr2	NM_008625	14198956	14209397	14147167	14249776	-	-100k	+	AS	mannose receptor, C type 1 precursor
414	UID395	chr2	NM_001012396	14035575	14046058	13944584	13973789	-	-100k	-	AS	protein tyrosine phosphatase-like (proline
415	UID395	chr2	NM_013935	14035575	14046058	13944584	13973789	-	-100k	-	AS	protein tyrosine phosphatase-like (proline
416	UID395	chr2	NM_011484	14035575	14046058	13991865	14066084	-	-50k	+	AS	signal transducing adaptor molecule (SH3 domain)
417	UID395	chr2	NM_001081310	14035575	14046058	14092277	14139747	-	+100k	+	AS	hypothetical protein LOC625286
418	UID401	chr15	NM_199476	37801959	37812400	37868541	37905644	+	+100k	-	AS	ribonucleotide reductase M2 B (TP53 inducible)
419	UID405	chr15	NM_001081391	47375922	47386405	47410711	48622063	+	+50k	-	AS	CUB and Sushi multiple domains 3
420	UID412	chr15	NM_133766	65542630	65553030	65616713	65703485	+	+100k	+	AS	RIKEN cDNA C920006C10
421	UID413	chr15	NM_133766	65564653	65575094	65616713	65703485	+	+100k	+	AS	RIKEN cDNA C920006C10
422	UID416	chr15	NM_026817	89484602	89494999	89410293	89419690	+	-100k	-	AS	RAB, member of RAS oncogene family-like 2A
423	UID416	chr15	NM_013455	89484602	89494999	89396092	89402351	+	-100k	+	S	acrosin precursor
424	UID417	chr15	NM_001033441	90017674	90028114	90052077	90058321	+	+50k	+	AS	expressed sequence AU045404

425	UID418	chr15	NM_001003670	101480729	101491170	101452061	101456222	+	-50k	-	AS	type II keratin Kb14
426	UID418	chr15	NM_010669	101480729	101491170	101504056	101508323	+	+50k	-	AS	keratin complex 2, basic, gene 6b
427	UID418	chr15	NM_008476	101480729	101491170	101517961	101522339	+	+50k	-	AS	keratin 6A
428	UID418	chr15	NM_019956	101480729	101491170	101561982	101571131	+	+100k	-	AS	keratin 71
429	UID418	chr15	NM_027011	101480729	101491170	101535103	101540925	+	+100k	-	AS	keratin 5
430	UID418	chr15	NM_133357	101480729	101491170	101391376	101401938	+	-100k	-	AS	keratin 75
431	UID418	chr15	NR_002869	101480729	101491170	101436907	101438513	+	-50k	+	S	
432	UID418	chr15	NR_003960	101480729	101491170	101471053	101475414	+	-10k	-	AS	
433	UID418	chr15	NR_002868	101480729	101491170	101415350	101416606	+	-100k	-	AS	
434	UID419	chr15	NM_013866	103237149	103247590	103141928	103168120	+	-100k	-	AS	zinc finger protein 385A
435	UID419	chr15	NM_008800	103237149	103247590	103331331	103358086	+	+100k	+	AS	phosphodiesterase 1B
436	UID419	chr15	NM_153505	103237149	103247590	103281858	103326834	+	+50k	+	AS	NCK associated protein 1 like
437	UID419	chr15	NM_177631	103237149	103247590	103266993	103276493	+	+50k	-	AS	hypothetical protein LOC223927
438	UID419	chr15	NM_010577	103237149	103247590	103172322	103194782	+	-100k	-	AS	integrin alpha 5 preproprotein
439	UID419	chr15	NM_028797	103237149	103247590	103230494	103258461	+	-10k	-	AS	gametocyte specific factor 1
440	UID421	chr15	NM_177431	94122605	94132999	94098342	94232438	-	-50k	-	AS	a disintegrin-like and metalloprotease with
441	UID423	chr15	NM_177820	77324726	77335152	77411412	77423380	-	+100k	-	S	apolipoprotein L 10b
442	UID423	chr15	NM_001024848	77324726	77335152	77249463	77274715	-	-100k	-	AS	apolipoprotein L 7b
443	UID423	chr15	NM_177744	77324726	77335152	77304301	77318324	-	-50k	+	AS	apolipoprotein L 10a
444	UID423	chr15	NM_175391	77324726	77335152	77352121	77360570	-	+50k	-	S	apolipoprotein L 7c
445	UID423	chr15	NM_001162883	77324726	77335152	77231044	77238335	-	-100k	-	AS	apolipoprotein L 9a
446	UID423	chr15	NM_173786	77324726	77335152	77231044	77238289	-	-100k	-	AS	apolipoprotein L 9a
447	UID424	chr15	NM_027668	59887578	59897976	59844546	59846299	-	-50k	-	AS	hypothetical protein LOC71088
448	UID425	chr15	NM_008764	54033784	54044225	54080701	54108567	-	+50k	-	S	tumor necrosis factor receptor superfamily,
449	UID431	chr15	NM_001085421	33682447	33692888	33628463	33632472	-	-100k	-	AS	testis-specific protein, Y-encoded-like 5
450	UID436	chr15	NM_177355	4362922	4373363	4325490	4525579	-	-50k	+	AS	phosphatidylinositol-specific phospholipase C, X
451	UID437	chr1	NM_010342	5807250	5817691	5903788	5907479	+	+100k	-	AS	G protein-coupled receptor 7
452	UID441	chr1	NM_175642	25061569	25072007	25012021	25774253	+	-50k	-	AS	brain-specific angiogenesis inhibitor 3
453	UID449	chr1	NM_144953	52881512	52891953	52869671	52897385	+	-20k	-	AS	hypothetical protein LOC67080
454	UID449	chr1	NM_146108	52881512	52891953	52789590	52865405	+	-100k	+	S	3-hydroxyisobutyryl-Coenzyme A hydrolase
455	UID450	chr1	NM_001033194	54328823	54339264	54342125	54383516	+	+20k	-	AS	general transcription factor IIIC, polypeptide
456	UID450	chr1	NM_001163314	54328823	54339264	54425250	54502227	+	+100k	-	AS	GPI deacylase
457	UID451	chr1	NM_007642	60629144	60639587	60690933	60717905	+	+100k	+	AS	CD28 antigen precursor
458	UID453	chr1	NM_001081050	61602207	61612605	61573099	62576560	+	-50k	+	S	par-3 partitioning defective 3 homolog B
459	UID458	chr1	NM_175210	71180548	71190985	71176297	71348118	+	-5k	-	AS	ATP-binding cassette, sub-family A (ABC1),
460	UID459	chr1	NM_009129	79256909	79267350	79313692	79319114	+	+100k	-	AS	secretogranin II precursor
461	UID462	chr1	NM_152915	84327845	84338243	84248863	84575246	+	-100k	-	AS	delta/notch-like EGF-related receptor precursor
462	UID466	chr1	NM_029349	107392524	107402965	107491407	107582678	+	+100k	+	AS	hypothetical protein LOC227446 isoform 2
463	UID466	chr1	NM_013784	107392524	107402965	107348686	107491223	+	-50k	-	AS	phosphatidylinositol glycan anchor biosynthesis,
464	UID466	chr1	NM_173187	107392524	107402965	107491407	107582678	+	+100k	+	AS	hypothetical protein LOC227446 isoform 1
465	UID470	chr1	NM_019933	121568923	121579364	121485638	121664617	+	-100k	-	AS	protein tyrosine phosphatase, non-receptor type
466	UID473	chr1	NM_177243	133505111	133515552	133571567	133597951	+	+100k	+	AS	solute carrier family 26, member 9
467	UID473	chr1	NM_145509	133505111	133515552	133516240	133541010	+	+20k	+	AS	RAB7B, member RAS oncogene family

468	UID473	chr1	NM_007799	133505111	133515552	133465859	133503053	+	-50k	+	S	cathepsin E preproprotein
469	UID473	chr1	NM_011924	133505111	133515552	133426659	133439546	+	-100k	+	S	arginine vasopressin receptor 1B
470	UID475	chr1	NM_001159866	145621532	145631973	145539495	145569684	+	-100k	+	S	ubiquitin carboxyl-terminal hydrolase L5 isoform
471	UID475	chr1	NM_019562	145621532	145631973	145539495	145569684	+	-100k	+	S	ubiquitin carboxyl-terminal hydrolase L5 isoform
472	UID476	chr1	NM_009061	145824468	145834869	145761555	145766367	+	-100k	-	AS	regulator of G-protein signaling 2
473	UID476	chr1	NM_153171	145824468	145834869	145900884	145939590	+	+100k	-	AS	regulator of G-protein signaling 13
474	UID477	chr1	NM_022881	146566112	146576510	146515058	146537639	+	-100k	-	AS	regulator of G-protein signaling 18
475	UID478	chr1	NM_153539	148204686	148215081	148257883	148664690	+	+100k	+	AS	family with sequence similarity 5, member C
476	UID478	chr1	NM_001145807	148204686	148215081	148259904	148664690	+	+100k	+	AS	family with sequence similarity 5, member C
477	UID482	chr1	NM_024458	151992226	152002666	152081634	152096123	+	+100k	+	AS	phosducin
478	UID482	chr1	NM_001159730	151992226	152002666	152081634	152096123	+	+100k	+	AS	phosducin
479	UID487	chr1	NM_010778	196749422	196759820	196742623	196792972	-	-10k	-	AS	CD46 antigen, complement regulatory protein
480	UID487	chr1	NM_007758	196749422	196759820	196837534	196877439	-	+100k	-	S	complement receptor 2
481	UID487	chr1	NM_013499	196749422	196759820	196804511	196832294	-	+100k	-	S	complement receptor related protein
482	UID488	chr1	NM_146106	187803943	187814384	187788519	187818098	-	-20k	-	AS	lysophospholipase-like 1
483	UID494	chr1	NM_001029977	141459541	141469941	141514329	141597650	-	+100k	-	S	complement factor H-related protein C isoform 1
484	UID494	chr1	NM_015780	141459541	141469941	141363474	141376633	-	-100k	-	AS	complement factor H-related 1
485	UID494	chr1	NM_001160303	141459541	141469941	141514329	141597650	-	+100k	-	S	complement factor H-related protein C isoform 2
486	UID494	chr1	NM_001160304	141459541	141469941	141514329	141597650	-	+100k	-	S	complement factor H-related protein C isoform 3
487	UID498	chr1	NM_027971	108675396	108685837	108761995	108784625	-	+100k	+	AS	serine (or cysteine) proteinase inhibitor, clade
488	UID498	chr1	NM_009257	108675396	108685837	108688726	108710895	-	+20k	+	AS	serine (or cysteine) proteinase inhibitor, clade
489	UID498	chr1	NM_009190	108675396	108685837	108598334	108624272	-	-100k	-	AS	vacuolar protein sorting 4b
490	UID506	chr1	NM_172422	63763229	63773627	63664900	63687661	-	-100k	+	AS	FAST kinase domains 2
491	UID509	chr1	NM_001077406	62604615	62615056	62637592	62731367	-	+50k	+	AS	neuropilin 2 isoform 5 precursor
492	UID509	chr1	NM_001077404	62604615	62615056	62637592	62752968	-	+50k	+	AS	neuropilin 2 isoform 2 precursor
493	UID509	chr1	NM_001077405	62604615	62615056	62637592	62752968	-	+50k	+	AS	neuropilin 2 isoform 4 precursor
494	UID509	chr1	NM_010939	62604615	62615056	62637592	62752968	-	+50k	+	AS	neuropilin 2 isoform 3 precursor
495	UID509	chr1	NM_001077407	62604615	62615056	62637592	62731367	-	+50k	+	AS	neuropilin 2 isoform 6 precursor
496	UID509	chr1	NM_001077403	62604615	62615056	62637592	62752968	-	+50k	+	AS	neuropilin 2 isoform 1 precursor
497	UID512	chr1	NM_144953	52831261	52841697	52869671	52897385	-	+50k	-	S	hypothetical protein LOC67080
498	UID512	chr1	NM_146108	52831261	52841697	52789590	52865405	-	-50k	+	AS	3-hydroxyisobutyryl-Coenzyme A hydrolase
499	UID512	chr1	NM_008384	52831261	52841697	52733964	52762233	-	-100k	-	AS	inositol polyphosphate-1-phosphatase
500	UID520	chr1	NM_001025305	19109931	19120329	19197267	19223948	-	+100k	+	AS	transcription factor AP-2 beta isoform 2
501	UID520	chr1	NM_009334	19109931	19120329	19194127	19223948	-	+100k	+	AS	transcription factor AP-2 beta isoform 1
502	UID520	chr1	NM_153154	19109931	19120329	19088235	19151546	-	-50k	+	AS	transcription factor AP-2, delta
503	UID522	chr1	NM_009352	15720779	15731177	15790871	15828643	-	+100k	+	AS	telomeric repeat binding factor 1
504	UID523	chr19	NM_026640	12566893	12577334	12640569	12656741	+	+100k	+	AS	hypothetical protein LOC107373
505	UID523	chr19	NM_146683	12566893	12577334	12489355	12490312	+	-100k	+	S	olfactory receptor 1441
506	UID523	chr19	NM_019540	12566893	12577334	12494949	12499155	+	-100k	+	S	pore forming protein-like
507	UID523	chr19	NM_010821	12566893	12577334	12527823	12532330	+	-50k	+	S	macrophage expressed gene 1
508	UID523	chr19	NM_172442	12566893	12577334	12533380	12569041	+	-50k	-	AS	deltex 4 homolog
509	UID524	chr19	NM_146345	13834768	13845209	13771847	13772807	+	-100k	+	S	olfactory receptor 1491
510	UID524	chr19	NM_146990	13834768	13845209	13816126	13817074	+	-20k	+	S	olfactory receptor 1494

511	UID524	chr19	NM_146344	13834768	13845209	13835362	13836322	+	+5k	+	AS	olfactory receptor 1495
512	UID524	chr19	NM_146989	13834768	13845209	13847632	13848586	+	+20k	+	AS	olfactory receptor 1496
513	UID524	chr19	NM_146741	13834768	13845209	13861683	13862628	+	+50k	-	AS	olfactory receptor 1497
514	UID524	chr19	NM_146796	13834768	13845209	13881662	13882607	+	+50k	-	AS	olfactory receptor 1499
515	UID524	chr19	NM_001011831	13834768	13845209	13894477	13895413	+	+100k	-	AS	olfactory receptor 1500
516	UID524	chr19	NM_146633	13834768	13845209	13905242	13906190	+	+100k	-	AS	olfactory receptor 1501
517	UID524	chr19	NM_146797	13834768	13845209	13928813	13929764	+	+100k	+	AS	olfactory receptor 1502
518	UID525	chr19	NM_146796	13963910	13974351	13881662	13882607	+	-100k	-	AS	olfactory receptor 1499
519	UID525	chr19	NM_001011831	13963910	13974351	13894477	13895413	+	-100k	-	AS	olfactory receptor 1500
520	UID525	chr19	NM_146633	13963910	13974351	13905242	13906190	+	-100k	-	AS	olfactory receptor 1501
521	UID525	chr19	NM_146797	13963910	13974351	13928813	13929764	+	-50k	+	S	olfactory receptor 1502
522	UID525	chr19	NM_146634	13963910	13974351	13954279	13955227	+	-10k	-	AS	olfactory receptor 1504
523	UID525	chr19	NM_001011850	13963910	13974351	13986040	13986991	+	+50k	+	AS	olfactory receptor 1505
524	UID526	chr19	NM_001011850	14064026	14074258	13986040	13986991	+	-100k	+	S	olfactory receptor 1505
525	UID529	chr19	NM_009551	21282478	21292918	21339374	21349386	+	+100k	+	AS	zinc finger, AN1-type domain 5
526	UID530	chr19	NM_009551	21301487	21311973	21339374	21349386	+	+50k	+	AS	zinc finger, AN1-type domain 5
527	UID534	chr19	NM_016861	40197212	40207647	40275549	40324927	+	+100k	-	AS	carboxyl terminal LIM domain protein 1
528	UID534	chr19	NM_145499	40197212	40207647	40206671	40240582	+	+10k	-	AS	cytochrome P450, family 2, subfamily c,
529	UID534	chr19	NM_134144	40197212	40207647	40143006	40167262	+	-100k	+	S	cytochrome P450, family 2, subfamily c,
530	UID539	chr19	NM_001033172	59867731	59878130	59958358	59998027	-	+100k	-	S	Rab11-family interacting protein 2 isoform 1
531	UID541	chr19	NM_025696	48278105	48288544	48259335	48858816	-	-20k	+	AS	sortilin-related VPS10 domain containing
532	UID543	chr19	NM_146097	24893139	24903537	24987523	25028655	-	+100k	-	S	COBW domain containing 1
533	UID543	chr19	NM_008022	24893139	24903537	24966061	24968406	-	+100k	-	S	forkhead box D4
534	UID544	chr19	NM_001035244	22710364	22720762	22759715	22993586	-	+50k	+	AS	transient receptor potential cation channel,
535	UID544	chr19	NM_001035246	22710364	22720762	22759715	22836477	-	+50k	+	AS	transient receptor potential cation channel,
536	UID544	chr19	NM_001035245	22710364	22720762	22759715	22839476	-	+50k	+	AS	transient receptor potential cation channel,
537	UID545	chr19	NM_028953	20815020	20825461	20850554	21021299	-	+50k	-	S	transmembrane channel-like gene family 1
538	UID545	chr19	NM_011921	20815020	20825461	20760049	20794653	-	-100k	-	AS	aldehyde dehydrogenase family 1, subfamily A7
539	UID547	chr19	NM_025731	7740731	7751130	7679613	7706283	-	-100k	+	AS	HRAS-like suppressor family, member 5
540	UID547	chr19	NM_019516	7740731	7751130	7663705	7674221	-	-100k	-	AS	lectin, galactose binding, soluble 12
541	UID547	chr19	NM_144785	7740731	7751130	7740120	7778298	-	-5k	-	AS	solute carrier family 22 (organic anion
542	UID549	chr13	NM_172445	8805838	8816222	8802213	8870288	+	-5k	-	AS	WD repeat domain 37 isoform a
543	UID549	chr13	NM_001039388	8805838	8816222	8802213	8870976	+	-5k	-	AS	WD repeat domain 37 isoform a
544	UID549	chr13	NM_001039389	8805838	8816222	8849724	8870288	+	+50k	-	AS	WD repeat domain 37 isoform b
545	UID549	chr13	NM_177960	8805838	8816222	8885219	8891614	+	+100k	+	AS	isopentenyl-diphosphate delta isomerase isoform
546	UID549	chr13	NM_145360	8805838	8816222	8885230	8891616	+	+100k	+	AS	isopentenyl-diphosphate delta isomerase isoform
547	UID550	chr13	NM_134244	22427901	22438342	22335375	22336272	+	-100k	+	S	vomeronasal 1 receptor, H21
548	UID550	chr13	NM_134220	22427901	22438342	22361810	22362713	+	-100k	+	S	vomeronasal 1 receptor, I3
549	UID550	chr13	NM_134213	22427901	22438342	22390002	22391106	+	-50k	+	S	vomeronasal 1 receptor, H4
550	UID550	chr13	NM_134212	22427901	22438342	22402493	22403432	+	-50k	+	S	vomeronasal 1 receptor, H3
551	UID550	chr13	NM_134221	22427901	22438342	22482082	22482985	+	+100k	+	AS	vomeronasal 1 receptor, I4
552	UID550	chr13	NM_134224	22427901	22438342	22508801	22509710	+	+100k	-	AS	vomeronasal 1 receptor, I7
553	UID551	chr13	NM_175663	24032958	24043399	23941237	23941621	+	-100k	-	AS	histone cluster 1, H2ba

554	UID551	chr13	NM_175658	24032958	24043399	23941926	23942316	+	-100k	+	S	histone cluster 1, H2aa
555	UID551	chr13	NM_145399	24032958	24043399	23960921	23998679	+	-100k	-	AS	secretagogin, EF-hand calcium binding protein
556	UID551	chr13	NM_026825	24032958	24043399	24019948	24288255	+	-20k	-	AS	leucine rich repeat containing 16A
557	UID556	chr13	NM_011455	33477008	33487449	33492254	33503463	+	+20k	+	AS	serine (or cysteine) proteinase inhibitor, clade
558	UID558	chr13	NM_001122948	40634228	40644626	40726648	40741417	+	+100k	-	AS	transcription factor AP-2, alpha isoform b
559	UID558	chr13	NM_011547	40634228	40644626	40726648	40744797	+	+100k	-	AS	transcription factor AP-2, alpha isoform a
560	UID559	chr13	NM_031166	48306418	48316859	48273363	48275973	+	-50k	+	S	inhibitor of DNA binding 4
561	UID561	chr13	NM_008957	63443664	63454105	63520754	63574742	+	+100k	-	AS	patched
562	UID565	chr13	NM_026173	97457507	97467896	97488992	97516286	-	+50k	+	AS	proteome of centriole 5
563	UID565	chr13	NM_001042714	97457507	97467896	97516832	97571859	-	+100k	-	S	ankyrin repeat and death domain containing 1B
564	UID571	chr13	NM_183197	33424882	33435323	33331541	33342831	-	-100k	+	AS	serine (or cysteine) proteinase inhibitor, clade
565	UID571	chr13	NM_011455	33424882	33435323	33492254	33503463	-	+100k	+	AS	serine (or cysteine) proteinase inhibitor, clade
566	UID572	chr13	NM_144536	29255505	29265949	29332770	29863053	-	+100k	-	S	CDK5 regulatory subunit associated protein
567	UID577	chr13	NM_134221	22549637	22560035	22482082	22482985	-	-100k	+	AS	vomer nasal 1 receptor, I4
568	UID577	chr13	NM_134224	22549637	22560035	22508801	22509710	-	-50k	-	AS	vomer nasal 1 receptor, I7
569	UID577	chr13	NM_134236	22549637	22560035	22531515	22532451	-	-20k	+	AS	vomer nasal 1 receptor, H11
570	UID577	chr13	NM_134217	22549637	22560035	22599444	22600395	-	+50k	-	S	vomer nasal 1 receptor, H8
571	UID577	chr13	NM_134216	22549637	22560035	22627561	22628500	-	+100k	-	S	vomer nasal 1 receptor, H7
572	UID577	chr13	NM_001045544	22549637	22560035	22563665	22564574	-	+20k	+	AS	vomer nasal receptor-like
573	UID578	chr13	NM_145846	22211378	22221864	22151985	22152990	-	-100k	-	AS	vomer nasal 1 receptor, I8
574	UID578	chr13	NM_145845	22211378	22221864	22194610	22195513	-	-20k	-	AS	vomer nasal 1 receptor, I1
575	UID578	chr13	NM_134225	22211378	22221864	22226325	22227285	-	+20k	-	S	vomer nasal 1 receptor, I9
576	UID578	chr13	NM_134223	22211378	22221864	22285826	22286777	-	+100k	+	AS	vomer nasal 1 receptor, I6
577	UID578	chr13	NM_001080972	22211378	22221864	22251679	22252570	-	+50k	+	AS	vomer nasal 1 receptor-like
578	UID583	chrX	NM_001085537	8543202	8553688	8507557	8508096	+	-50k	+	S	novel protein similar to histone H2a
579	UID583	chrX	NM_007807	8543202	8553688	8592210	8626283	+	+50k	-	AS	cytochrome b-245, beta polypeptide
580	UID584	chrX	NM_019634	9678816	9689257	9642074	9753563	+	-50k	+	S	tetraspanin 7
581	UID586	chrX	NM_001034100	13345061	13355544	13368106	13368616	+	+50k	+	AS	hypothetical protein LOC385328
582	UID594	chrX	NM_001081666	23128866	23139264	23114660	23115893	+	-20k	-	AS	hypothetical protein LOC245376
583	UID594	chrX	NM_001034864	23128866	23139264	23049721	23064509	+	-100k	+	S	Tes-like protein
584	UID595	chrX	NM_001100446	23675106	23685547	23709208	23731854	+	+50k	-	AS	hypothetical protein LOC100043216
585	UID595	chrX	NM_001100444	23675106	23685547	23631266	23657719	+	-50k	-	AS	hypothetical protein LOC546272
586	UID598	chrX	NM_001009947	32251489	32261930	32320276	32508007	+	+100k	+	AS	dedicator of cytokinesis 11
587	UID599	chrX	NM_001009947	32289440	32300838	32320276	32508007	+	+50k	+	AS	dedicator of cytokinesis 11
588	UID600	chrX	NM_023894	34151561	34162002	34143723	34146397	+	-10k	-	AS	reproductive homeobox on X chromosome, 9
589	UID600	chrX	NM_001025086	34151561	34162002	34076312	34085798	+	-100k	+	S	reproductive homeobox 7
590	UID600	chrX	NM_008955	34151561	34162002	34071681	34074484	+	-100k	+	S	reproductive homeobox on X chromosome, 6
591	UID600	chrX	NM_001004193	34151561	34162002	34119402	34123571	+	-50k	-	AS	reproductive homeobox on X chromosome, 8
592	UID605	chrX	NM_001033422	37985916	37996356	38039620	38156528	+	+100k	-	AS	THO complex subunit 2
593	UID606	chrX	NM_011855	38874332	38884773	38777019	39519413	+	-100k	-	AS	odd Oz/ten-m homolog 1
594	UID610	chrX	NM_175539	40628796	40639194	40610083	40612964	+	-20k	-	AS	WD repeat domain 40C
595	UID612	chrX	NM_028514	42514326	42524724	42573633	42574972	+	+100k	+	AS	actin-related protein T1
596	UID615	chrX	NM_053123	44031125	44041559	44053996	44137146	+	+50k	-	AS	SWI/SNF related, matrix associated, actin

597	UID616	chrX	NM_053123	44108861	44119302	44053996	44137146	+	-100k	-	AS	SWI/SNF related, matrix associated, actin
598	UID616	chrX	NM_177215	44108861	44119302	44157082	44210493	+	+50k	+	AS	phosphatidylinositol polyphosphate
599	UID619	chrX	NM_146390	46325619	46336102	46253932	46254862	+	-100k	-	AS	olfactory receptor 1323
600	UID622	chrX	NM_015819	47678305	47688703	47631838	47925104	+	-50k	-	AS	heparan sulfate 6-O-sulfotransferase 2 isoform
601	UID622	chrX	NM_001077202	47678305	47688703	47631838	47926229	+	-50k	-	AS	heparan sulfate 6-O-sulfotransferase 2 isoform
602	UID623	chrX	NM_031388	47970946	47983679	47998585	48042380	+	+50k	-	AS	ubiquitin specific peptidase 26
603	UID624	chrX	NM_027510	52425594	52435990	52483355	52500280	+	+100k	+	AS	Xlr-like
604	UID625	chrX	NM_001033360	53887439	53897837	53843451	53850501	+	-50k	-	AS	G protein-coupled receptor 101
605	UID633	chrX	NM_027512	60383449	60393890	60434226	60439443	+	+100k	+	AS	hypothetical protein LOC70696
606	UID637	chrX	NM_001161431	62866501	62876899	62909982	62922066	+	+50k	+	AS	SLIT and NTRK-like family, member 2 precursor
607	UID637	chrX	NM_198863	62866501	62876899	62913823	62922066	+	+50k	+	AS	SLIT and NTRK-like family, member 2 precursor
608	UID641	chrX	NM_010498	66522155	66532553	66603734	66625640	+	+100k	-	AS	iduronate-2-sulfatase isoform a
609	UID641	chrX	NM_001038991	66522155	66532553	66603734	66625640	+	+100k	-	AS	iduronate-2-sulfatase isoform b
610	UID641	chrX	NM_001038990	66522155	66532553	66603734	66625640	+	+100k	-	AS	iduronate-2-sulfatase isoform b
611	UID642	chrX	NM_020280	68393346	68403784	68474736	68475683	+	+100k	+	AS	melanoma antigen family A, 4
612	UID644	chrX	NM_001081670	71115017	71125500	71089915	71096075	+	-50k	+	S	hypothetical protein LOC546325
613	UID645	chrX	NM_181584	71182549	71192991	71241269	71337625	+	+100k	-	AS	growth factor receptor bound protein
614	UID645	chrX	NM_001081670	71182549	71192991	71089915	71096075	+	-100k	+	S	hypothetical protein LOC546325
615	UID646	chrX	NM_026126	71553429	71563870	71635141	71648836	+	+100k	+	AS	FUN14 domain containing 2
616	UID647	chrX	NM_001013760	72486155	72496601	72517024	72520392	+	+50k	+	AS	hypothetical protein LOC238829
617	UID648	chrX	NM_001013760	72612631	72623069	72517024	72520392	+	-100k	+	S	hypothetical protein LOC238829
618	UID648	chrX	NM_001033799	72612631	72623069	72646068	72650698	+	+50k	+	AS	hypothetical protein LOC619294
619	UID658	chrX	NM_173435	77662868	77673266	77672293	77710841	+	+10k	-	AS	hypothetical protein LOC245492
620	UID661	chrX	NM_001160403	83071903	83082300	82999961	84368342	+	-100k	-	AS	interleukin 1 receptor accessory protein-like 1
621	UID663	chrX	NM_008821	85671989	85682387	85656566	85662408	+	-20k	-	AS	plasmacytoma expressed transcript 2
622	UID664	chrX	NM_008821	85738006	85748447	85656566	85662408	+	-100k	-	AS	plasmacytoma expressed transcript 2
623	UID668	chrX	NM_029590	91943877	91954275	91935308	91935980	+	-10k	-	AS	hypothetical protein LOC76386
624	UID668	chrX	NM_001034907	91943877	91954275	91914396	92130689	+	-50k	+	S	zinc finger CCCH-type containing 12B
625	UID670	chrX	NM_001159627	92578862	92589303	92659064	92777201	+	+100k	+	AS	hephaestin isoform 1
626	UID670	chrX	NM_010417	92578862	92589303	92658154	92777201	+	+100k	+	AS	hephaestin isoform 1
627	UID670	chrX	NM_172931	92578862	92589303	92509585	92559959	+	-100k	-	AS	hypothetical protein LOC245525
628	UID670	chrX	NM_181273	92578862	92589303	92659064	92734142	+	+100k	+	AS	hephaestin isoform 2
629	UID670	chrX	NM_001159628	92578862	92589303	92658154	92777201	+	+100k	+	AS	hephaestin isoform 3
630	UID676	chrX	NM_173021	98760622	98771020	98716693	98846965	+	-50k	-	AS	phosphorylase kinase alpha 1 isoform 2
631	UID676	chrX	NM_008832	98760622	98771020	98716693	98846965	+	-50k	-	AS	phosphorylase kinase alpha 1 isoform 1
632	UID677	chrX	NM_001077354	100367420	100377861	100280154	100403836	+	-100k	-	AS	hypothetical protein LOC245555
633	UID678	chrX	NM_175358	100822324	100832765	100741268	100873522	+	-100k	-	AS	zinc finger, DHHC domain containing 15
634	UID679	chrX	NM_175358	100838663	100849097	100741268	100873522	+	-100k	-	AS	zinc finger, DHHC domain containing 15
635	UID680	chrX	NM_053206	100997922	101008363	101057670	101059986	+	+100k	-	AS	melanoma antigen, family E, 2
636	UID682	chrX	NM_026312	101219972	101230463	101282493	101287905	+	+100k	+	AS	hypothetical protein LOC67683
637	UID683	chrX	NM_009530	101936168	101946609	102000335	102132091	+	+100k	-	AS	alpha thalassemia/mental retardation syndrome
638	UID683	chrX	NM_030614	101936168	101946609	101967195	101979251	+	+50k	+	AS	fibroblast growth factor 16
639	UID684	chrX	NM_009530	101939900	101950299	102000335	102132091	+	+100k	-	AS	alpha thalassemia/mental retardation syndrome

640	UID684	chrX	NM_030614	101939900	101950299	101967195	101979251	+	+50k	+	AS	fibroblast growth factor 16
641	UID685	chrX	NM_001033251	103529933	103540374	103458746	103498026	+	-100k	+	S	G protein-coupled receptor 174
642	UID685	chrX	NM_008409	103529933	103540374	103599913	103606079	+	+100k	-	AS	integral membrane protein 2A
643	UID689	chrX	NM_033605	109465788	109477995	109415199	109953330	+	-100k	+	S	dachshund 2 isoform 2
644	UID689	chrX	NM_001142570	109465788	109477995	109415199	109952035	+	-100k	+	S	dachshund 2 isoform 1
645	UID691	chrX	NM_001081661	111115236	111125677	111024525	111025454	+	-100k	+	S	hypothetical protein LOC75097
646	UID691	chrX	NR_003645	111115236	111125677	111021955	111022885	+	-100k	+	S	
647	UID692	chrX	NM_001102665	113203371	113213854	113131700	113132048	+	-100k	+	S	predicted gene 14920
648	UID694	chrX	NM_001081385	116499515	116509953	116407270	117023394	+	-100k	+	S	protocadherin 11 X-linked
649	UID700	chrX	NM_001111144	122286109	122296504	122373175	122375212	+	+100k	-	AS	hypothetical protein LOC214308
650	UID700	chrX	NM_177705	122286109	122296504	122280056	122283460	+	-10k	-	AS	Myb-like DNA-binding domain containing protein
651	UID703	chrX	NM_031259	130235289	130245688	130290894	130311118	+	+100k	-	AS	nuclear RNA export factor 2
652	UID703	chrX	NM_175446	130235289	130245688	130317736	130355573	+	+100k	-	AS	zinc finger, matrin type 1
653	UID703	chrX	NM_026139	130235289	130245688	130150510	130155358	+	-100k	-	AS	armadillo repeat containing, X-linked 2
654	UID704	chrX	NM_031390	130737689	130748979	130648675	130659000	+	-100k	+	S	preferentially expressed antigen in
655	UID704	chrX	NM_183320	130737689	130748979	130719647	130729757	+	-20k	+	S	hypothetical protein LOC331529
656	UID704	chrX	NM_183320	130737689	130748979	130780198	130790361	+	+50k	+	AS	hypothetical protein LOC331529
657	UID704	chrX	NM_177918	130798287	130809578	130840951	130850958	+	+50k	+	AS	hypothetical protein LOC331531
658	UID704	chrX	NM_001099321	130798287	130809578	130840951	130850958	+	+50k	+	AS	hypothetical protein LOC100040635
659	UID704	chrX	NM_183320	130798287	130809578	130719647	130729757	+	-100k	+	S	hypothetical protein LOC331529
660	UID704	chrX	NM_183320	130798287	130809578	130780198	130790361	+	-20k	+	S	hypothetical protein LOC331529
661	UID705	chrX	NM_177918	130798288	130809578	130840951	130850958	+	+50k	+	AS	hypothetical protein LOC331531
662	UID705	chrX	NM_001099321	130798288	130809578	130840951	130850958	+	+50k	+	AS	hypothetical protein LOC100040635
663	UID705	chrX	NM_183320	130798288	130809578	130719647	130729757	+	-100k	+	S	hypothetical protein LOC331529
664	UID705	chrX	NM_183320	130798288	130809578	130780198	130790361	+	-20k	+	S	hypothetical protein LOC331529
665	UID705	chrX	NM_031390	130737690	130748979	130648675	130659000	+	-100k	+	S	preferentially expressed antigen in
666	UID705	chrX	NM_183320	130737690	130748979	130719647	130729757	+	-20k	+	S	hypothetical protein LOC331529
667	UID705	chrX	NM_183320	130737690	130748979	130780198	130790361	+	+50k	+	AS	hypothetical protein LOC331529
668	UID707	chrX	NM_011635	134726288	134736729	134680046	134684529	+	-50k	+	S	tumor rejection antigen P1A
669	UID708	chrX	NM_019496	138106027	138116468	138099841	138213096	+	-10k	-	AS	AMMECR1 protein
670	UID711	chrX	NM_008824	145867580	145878021	145930636	145984576	+	+100k	+	AS	6-phosphofructo-2-kinase/fructose-2,
671	UID711	chrX	NM_029943	145867580	145878021	145912222	145928865	+	+50k	-	AS	apurinic/aprimidinic endonuclease 2
672	UID711	chrX	NM_001102446	145867580	145878021	145888132	145911338	+	+50k	+	AS	5-aminolevulinate synthase 2 isoform b
673	UID711	chrX	NM_009653	145867580	145878021	145888132	145911338	+	+50k	+	AS	5-aminolevulinate synthase 2 isoform a
674	UID713	chrX	NM_177201	146839563	146849961	146861387	146966549	+	+50k	+	AS	PHD finger protein 8 isoform a
675	UID713	chrX	NM_001113354	146839563	146849961	146861387	146974573	+	+50k	+	AS	PHD finger protein 8 isoform b
676	UID714	chrX	NM_021523	147081291	147091734	147143997	147276133	+	+100k	+	AS	HECT, UBA and WWE domain containing 1
677	UID715	chrX	NM_027543	147777164	147787562	147685361	147708827	+	-100k	-	AS	G-protein coupled receptor 173
678	UID715	chrX	NM_029836	147777164	147787562	147677567	147683200	+	-100k	-	AS	nucleolar TGF-beta1 target protein
679	UID716	chrX	NM_172441	147861759	147872200	147950224	148110177	+	+100k	-	AS	shroom family member 2
680	UID717	chrX	NM_029199	149838496	149848729	149822717	149825398	+	-20k	+	S	hypothetical protein LOC75185
681	UID717	chrX	NM_001037167	149838496	149848729	149915943	149920046	+	+100k	-	AS	hypothetical protein LOC434881
682	UID726	chrX	NM_009031	158010254	158020652	158104476	158123195	+	+100k	+	AS	retinoblastoma binding protein 7



683	UID728	chrX	NM_183427	160429873	160440314	160473121	160671086	+	+50k	-	AS	glycine receptor, alpha 2 subunit precursor
684	UID729	chrX	NM_133211	162554890	162565331	162649035	162674633	+	+100k	-	AS	toll-like receptor 7 precursor
685	UID729	chrX	NM_021278	162554890	162565331	162551198	162553323	+	-5k	-	AS	thymosin, beta 4, X chromosome
686	UID729	chrX	NM_133212	162554890	162565331	162586836	162607893	+	+50k	-	AS	toll-like receptor 8 precursor
687	UID730	chrX	NM_001081978	164501103	164511543	164520218	164531314	+	+20k	-	AS	amelogenin X chromosome isoform 1
688	UID730	chrX	NM_009666	164501103	164511543	164524125	164531314	+	+50k	-	AS	amelogenin X chromosome isoform 2
689	UID731	chrX	NM_008222	164626521	164638971	164655634	164664448	+	+50k	-	AS	holocytochrome c synthase
690	UID732	chrX	NM_008222	164752956	164763391	164655634	164664448	+	-100k	-	AS	holocytochrome c synthase
691	UID733	chrX	NM_010797	165081605	165092046	165029351	165334902	+	-100k	+	S	midline 1
692	UID733	chrX	NR_003635	165081605	165092046	165120482	165123740	+	+50k	-	AS	
693	UID734	chrX	NM_027027	159905773	159916214	159842007	159883857	-	-100k	+	AS	ankyrin repeat and SOCS box-containing 9
694	UID735	chrX	NM_010216	159694299	159704740	159717652	159746752	-	+50k	+	AS	c-fos induced growth factor precursor
695	UID735	chrX	NM_026853	159694299	159704740	159782205	159803205	-	+100k	+	AS	ankyrin repeat and SOCS box-containing 11
696	UID735	chrX	NM_011081	159694299	159704740	159763891	159778020	-	+100k	+	AS	phosphatidylinositol glycan, class A
697	UID735	chrX	NM_027153	159694299	159704740	159613541	159717010	-	-100k	+	AS	pirin
698	UID736	chrX	NM_198409	157049270	157059668	157061657	157123599	-	+20k	+	AS	retinoic acid induced 2
699	UID736	chrX	NM_001103367	157049270	157059668	157061140	157123599	-	+20k	+	AS	retinoic acid induced 2
700	UID739	chrX	NM_011147	155996464	156006905	155967199	156064077	-	-50k	-	AS	protein phosphatase with EF hand calcium-binding
701	UID740	chrX	NM_172783	155877732	155888131	155846794	155935827	-	-50k	+	AS	phosphorylase kinase alpha 2
702	UID740	chrX	NM_011147	155877732	155888131	155967199	156064077	-	+100k	-	S	protein phosphatase with EF hand calcium-binding
703	UID742	chrX	NM_001081667	153106281	153116722	153162539	153164474	-	+100k	+	AS	kelch-like 34
704	UID742	chrX	NM_177751	153106281	153116722	153165677	153387215	-	+100k	-	S	connector enhancer of kinase suppressor of Ras
705	UID742	chrX	NM_025357	153106281	153116722	153043222	153096694	-	-100k	+	AS	small muscle protein, X-linked
706	UID745	chrX	NM_001081671	150561023	150571464	150465696	150488565	-	-100k	-	AS	hypothetical protein LOC73347
707	UID745	chrX	NM_019736	150561023	150571464	150603215	150638223	-	+50k	+	AS	acyl-CoA thioesterase 9
708	UID745	chrX	NM_009121	150561023	150571464	150553854	150557125	-	-10k	-	AS	diamine N-acetyltransferase 1
709	UID746	chrX	NM_030700	146201329	146211689	146147136	146154998	-	-100k	-	AS	melanoma antigen family D, 2
710	UID746	chrX	NR_003597	146201329	146211689	146168404	146197658	-	-50k	+	AS	
711	UID747	chrX	NM_019548	145954100	145964498	145986018	145998152	-	+50k	-	S	trophinin isoform 3
712	UID747	chrX	NM_008824	145954100	145964498	145930636	145984576	-	-50k	+	AS	6-phosphofructo-2-kinase/fructose-2,
713	UID747	chrX	NM_029943	145954100	145964498	145912222	145928865	-	-50k	-	AS	apurinic/aprimidinic endonuclease 2
714	UID747	chrX	NM_001102446	145954100	145964498	145888132	145911338	-	-100k	+	AS	5-aminolevulinate synthase 2 isoform b
715	UID747	chrX	NM_009653	145954100	145964498	145888132	145911338	-	-100k	+	AS	5-aminolevulinate synthase 2 isoform a
716	UID747	chrX	NM_001002272	145954100	145964498	145986018	145998152	-	+50k	-	S	trophinin isoform 1
717	UID748	chrX	NM_178358	140479341	140489741	140536726	140595262	-	+100k	-	S	lipoma HMGIC fusion partner-like 1 precursor
718	UID749	chrX	NM_026247	139467596	139478038	139564390	139571556	-	+100k	+	AS	glycosyltransferase 28 domain containing 1
719	UID750	chrX	NM_031258	138501851	138512294	138543525	138640630	-	+50k	-	S	chordin-like 1 2
720	UID750	chrX	NM_001114385	138501851	138512294	138532041	138640630	-	+50k	-	S	chordin-like 1 1
721	UID751	chrX	NM_177592	137954205	137964646	137927785	138084606	-	-50k	+	AS	transmembrane protein 164
722	UID753	chrX	NM_010572	136986733	136997174	136957365	136971585	-	-50k	-	AS	insulin receptor substrate 4
723	UID754	chrX	NM_001163155	136806493	136816936	136721786	136935603	-	-100k	+	AS	collagen, type IV, alpha 5
724	UID754	chrX	NM_007736	136806493	136816936	136721786	136935603	-	-100k	+	AS	collagen, type IV, alpha 5
725	UID755	chrX	NM_013757	129220484	129230882	129282734	129328133	-	+100k	-	S	synaptotagmin-like 4

726	UID755	chrX	NM_001083895	129220484	129230882	129254775	129278800	-	+50k	+	AS	sushi-repeat containing protein precursor
727	UID755	chrX	NM_026838	129220484	129230882	129254775	129278800	-	+50k	+	AS	sushi-repeat containing protein precursor
728	UID755	chrX	NM_019656	129220484	129230882	129237419	129244779	-	+20k	-	S	tetraspanin 6
729	UID755	chrX	NM_022322	129220484	129230882	129197357	129211927	-	-50k	+	AS	tenomodulin
730	UID765	chrX	NM_001033241	122591316	122601757	122507566	122531581	-	-100k	+	AS	hypothetical protein LOC211208
731	UID774	chrX	NM_031382	108260980	108271463	108210463	108244270	-	-100k	+	AS	testis expressed gene 16
732	UID779	chrX	NM_145224	103932616	103943014	103870682	103891694	-	-100k	+	AS	T-box 22 isoform 1
733	UID779	chrX	NM_025921	103932616	103943014	103985472	104019053	-	+100k	-	S	hypothetical protein LOC67028
734	UID779	chrX	NM_181319	103932616	103943014	103881681	103891696	-	-100k	+	AS	T-box 22 isoform 2
735	UID779	chrX	NM_001163104	103932616	103943014	104019290	104075628	-	+100k	+	AS	hypothetical protein LOC213449
736	UID780	chrX	NM_001122595	103252805	103263246	103352172	103376380	-	+100k	+	AS	purinergic receptor P2Y G-protein coupled
737	UID780	chrX	NM_001122596	103252805	103263246	103351645	103376380	-	+100k	+	AS	purinergic receptor P2Y G-protein coupled
738	UID780	chrX	NM_172435	103252805	103263246	103292053	103307689	-	+50k	+	AS	purinergic receptor P2Y, G-protein coupled 10
739	UID780	chrX	NM_175442	103252805	103263246	103352333	103376380	-	+100k	+	AS	purinergic receptor P2Y G-protein coupled
740	UID781	chrX	NM_172435	103249186	103259584	103292053	103307689	-	+50k	+	AS	purinergic receptor P2Y, G-protein coupled 10
741	UID782	chrX	NM_009592	100468286	100478684	100483283	100616565	-	+20k	-	S	ATP-binding cassette, sub-family B (MDR/TAP),
742	UID783	chrX	NM_031384	97060755	97071196	97041382	97262356	-	-20k	-	AS	testis expressed gene 11
743	UID783	chrX	NM_016747	97060755	97071196	96970465	97021127	-	-100k	+	AS	synapse-associated protein 102
744	UID784	chrX	NM_031384	96960751	96971195	97041382	97262356	-	+100k	-	S	testis expressed gene 11
745	UID784	chrX	NM_023608	96960751	96971195	96932565	96941618	-	-50k	+	AS	osteoblast differentiation promoting factor
746	UID784	chrX	NM_016747	96960751	96971195	96970465	97021127	-	+10k	+	AS	synapse-associated protein 102
747	UID789	chrX	NM_001003916	91895002	91905443	91841915	91861151	-	-100k	-	AS	zinc finger, C4H2 domain containing
748	UID789	chrX	NM_029590	91895002	91905443	91935308	91935980	-	+50k	-	S	hypothetical protein LOC76386
749	UID789	chrX	NM_001034907	91895002	91905443	91914396	92130689	-	+20k	+	AS	zinc finger CCCH-type containing 12B
750	UID790	chrX	NM_080858	91614141	91624539	91672917	91680848	-	+100k	-	S	ankyrin repeat and SOCS box-containing 12
751	UID790	chrX	NM_175179	91614141	91624539	91623032	91647559	-	+10k	-	S	RIKEN cDNA 2810002O09
752	UID793	chrX	NM_0011101450	87090743	87101184	87144860	87145851	-	+100k	+	AS	hypothetical protein LOC212952
753	UID800	chrX	NM_001033492	82469542	82479941	82502974	82508938	-	+50k	-	S	hypothetical protein LOC434903
754	UID800	chrX	NM_007430	82469542	82479941	82444493	82448663	-	-50k	+	AS	nuclear receptor subfamily 0, group B, member 1
755	UID807	chrX	NM_001113734	75963409	75973850	75875949	75888301	-	-100k	-	AS	melanoma antigen family B, 16
756	UID807	chrX	NM_028025	75963409	75973850	75875949	75924154	-	-100k	-	AS	melanoma antigen family B, 16
757	UID809	chrX	NM_008621	71446004	71456445	71362452	71383669	-	-100k	-	AS	membrane protein, palmitoylated
758	UID809	chrX	NM_001030307	71446004	71456445	71348635	71362490	-	-100k	+	AS	dyskerin
759	UID809	chrX	NM_001161373	71446004	71456445	71425438	71632761	-	-50k	-	AS	coagulation factor VIII isoform 2
760	UID809	chrX	NM_001161374	71446004	71456445	71425438	71632761	-	-50k	-	AS	coagulation factor VIII isoform 3
761	UID809	chrX	NM_007977	71446004	71456445	71425438	71632761	-	-50k	-	AS	coagulation factor VIII isoform 1
762	UID809	chrX	NM_001033786	71446004	71456445	71398776	71416471	-	-50k	-	AS	hypothetical protein LOC434800 precursor
763	UID810	chrX	NM_001099302	70867532	70877973	70891838	70898355	-	+50k	-	S	hypothetical protein LOC434797
764	UID810	chrX	NM_146398	70867532	70877973	70847047	70847995	-	-50k	+	AS	olfactory receptor 1325
765	UID811	chrX	NM_021365	69551720	69562203	69467084	69475173	-	-100k	+	AS	X-linked lymphocyte-regulated 4B
766	UID811	chrX	NM_007978	69551720	69562203	69481025	69483515	-	-100k	+	AS	factor 8-associated gene A
767	UID811	chrX	NM_183094	69551720	69562203	69486795	69495850	-	-100k	-	AS	X-linked lymphocyte-regulated 4C
768	UID811	chrX	NM_011727	69551720	69562203	69507259	69518110	-	-50k	-	AS	X-linked lymphocyte-regulated 3C

769	UID811	chrX	NM_031493	69551720	69562203	69537916	69543235	-	-20k	-	AS	X-linked lymphocyte-regulated 5C
770	UID811	chrX	NM_031494	69551720	69562203	69595339	69611799	-	+50k	+	AS	Zinc finger protein 275 isoform 1
771	UID811	chrX	NM_001160229	69551720	69562203	69595340	69611799	-	+50k	+	AS	Zinc finger protein 275 isoform 2
772	UID812	chrX	NM_009549	69183886	69194269	69240058	69284263	-	+100k	+	AS	zinc finger protein 185 isoform a
773	UID812	chrX	NM_001109043	69183886	69194269	69240058	69284263	-	+100k	+	AS	zinc finger protein 185 isoform b
774	UID812	chrX	NM_019405	69183886	69194269	69166284	69171064	-	-20k	-	AS	centrin 2
775	UID812	chrX	NM_010941	69183886	69194269	69171240	69211248	-	-20k	+	AS	NAD(P) dependent steroid dehydrogenase-like
776	UID812	chrX	NM_181855	69183886	69194269	69122086	69122818	-	-100k	+	AS	melanoma antigen family A, 9
777	UID816	chrX	NM_007724	68331045	68341443	68244594	68262938	-	-100k	+	AS	cyclic nucleotide gated channel alpha 2
778	UID837	chrX	NM_028375	49852137	49862578	49802548	49803761	-	-50k	+	AS	CAAX box 1 homolog C
779	UID837	chrX	NM_001018063	49852137	49862578	49863803	49865035	-	+20k	-	S	CAAX box 1 homolog B
780	UID837	chrX	NM_029142	49852137	49862578	49919457	49932849	-	+100k	+	AS	hypothetical protein LOC75013
781	UID837	chrX	NM_024170	49852137	49862578	49837117	49838390	-	-20k	-	AS	mammalian retrotransposon derived 8b
782	UID839	chrX	NM_207240	45851717	45862158	45928130	45929090	-	+100k	+	AS	olfactory receptor 1320
783	UID840	chrX	NM_001081123	45804763	45815204	45715076	45744877	-	-100k	+	AS	hypothetical protein LOC75404
784	UID841	chrX	NM_181751	44999254	45009694	44912605	44919105	-	-100k	-	AS	G-protein coupled receptor 119
785	UID841	chrX	NM_173376	44999254	45009694	44939630	44955346	-	-100k	+	AS	RNA binding motif protein, X-linked 2
786	UID841	chrX	NM_001085499	44999254	45009694	45086092	45122340	-	+100k	-	S	hypothetical protein LOC209005
787	UID842	chrX	NM_181751	44942595	44953036	44912605	44919105	-	-50k	-	AS	G-protein coupled receptor 119
788	UID842	chrX	NM_011398	44942595	44953036	44868204	44906921	-	-100k	+	AS	solute carrier family 25 (mitochondrial carrier)
789	UID842	chrX	NM_173376	44942595	44953036	44939630	44955346	-	-5k	+	AS	RNA binding motif protein, X-linked 2
790	UID846	chrX	NM_011364	38810394	38820835	38747234	38766702	-	-100k	+	AS	SH2 domain protein 1A
791	UID846	chrX	NM_011855	38810394	38820835	38777019	39519413	-	-50k	-	AS	odd Oz/ten-m homolog 1
792	UID847	chrX	NM_009688	38232653	38243094	38312462	38354291	-	+100k	+	AS	baculoviral IAP repeat-containing 4
793	UID848	chrX	NM_001033422	38014257	38024697	38039620	38156528	-	+50k	-	S	THO complex subunit 2
794	UID849	chrX	NM_016886	37548703	37559144	37645930	37923228	-	+100k	+	AS	glutamate receptor, ionotropic, AMPA3 precursor
795	UID854	chrX	NM_029707	21668758	21679155	21618590	21619357	-	-100k	+	AS	hypothetical protein LOC76705
796	UID855	chrX	NM_029707	21656263	21666661	21618590	21619357	-	-50k	+	AS	hypothetical protein LOC76705
797	UID856	chrX	NM_007429	20559183	20569627	20641584	20645790	-	+100k	+	AS	angiotensin II receptor, type 2
798	UID856	chrX	NM_198633	20559183	20569627	20517823	20521581	-	-50k	+	AS	hypothetical protein LOC331392
799	UID861	chrX	NM_175228	17517318	17527801	17575385	17618233	-	+100k	-	S	hypothetical protein LOC75905 precursor
800	UID864	chrX	NM_019634	9559001	9569487	9642074	9753563	-	+100k	+	AS	tetraspanin 7
801	UID865	chrX	NM_001085517	8659076	8669512	8728918	8729350	-	+100k	-	S	hypothetical protein LOC333452
802	UID865	chrX	NM_007807	8659076	8669512	8592210	8626283	-	-100k	-	AS	cytochrome b-245, beta polypeptide
803	UID866	chrX	NM_001085537	8583236	8593634	8507557	8508096	-	-100k	+	AS	novel protein similar to histone H2a
804	UID866	chrX	NM_007807	8583236	8593634	8592210	8626283	-	+10k	-	S	cytochrome b-245, beta polypeptide
805	UID869	chr4	NM_145711	6573715	6584156	6614532	6917870	+	+50k	-	AS	thymocyte selection-associated high mobility
806	UID870	chr4	NM_007592	8115690	8126131	8068639	8166188	+	-50k	-	AS	carbonic anhydrase-like
807	UID871	chr4	NM_133723	9510417	9520867	9548056	9570864	+	+50k	-	AS	aspartate beta-hydroxylase isoform 2
808	UID872	chr4	NM_026558	12137097	12147494	12080868	12099162	+	-100k	-	AS	hypothetical protein LOC68099
809	UID872	chr4	NM_028226	12137097	12147494	12067263	12073892	+	-100k	+	S	RNA binding motif protein 12B
810	UID875	chr4	NM_178617	14978824	14989265	14879392	15076278	+	-100k	-	AS	N-terminal EF-hand calcium binding protein 1
811	UID876	chr4	NM_013752	15982683	15993124	15885113	15919736	+	-100k	+	S	nibrin

812	UID876	chr4	NM_138952	15982683	15993124	16050521	16090645	+	+100k	-	AS	receptor-interacting serine-threonine kinase 2
813	UID876	chr4	NM_145950	15982683	15993124	15924267	15941024	+	-100k	-	AS	oxidative stress induced growth inhibitor family
814	UID885	chr4	NM_013927	19114350	19124791	19207996	19437770	+	+100k	+	AS	cyclic nucleotide gated channel beta 3
815	UID888	chr4	NM_001080771	21738950	21749391	21768314	21776798	+	+50k	-	AS	PR domain containing 13
816	UID888	chr4	NM_016746	21738950	21749391	21818537	21841381	+	+100k	+	AS	cyclin C isoform 1
817	UID888	chr4	NM_001122982	21738950	21749391	21818537	21838797	+	+100k	+	AS	cyclin C isoform 2
818	UID894	chr4	NM_025545	40783085	40793526	40870748	40891587	+	+100k	-	AS	aprataxin isoform a
819	UID894	chr4	NM_001025444	40783085	40793526	40870748	40891858	+	+100k	-	AS	aprataxin isoform b
820	UID895	chr4	NM_023231	43141302	43151743	43048789	43052484	+	-100k	-	AS	stomatin-like protein 2
821	UID895	chr4	NM_172691	43141302	43151743	43053609	43067303	+	-100k	-	AS	hypothetical protein LOC230088
822	UID895	chr4	NM_001081413	43141302	43151743	43080083	43285973	+	-100k	+	S	unc-13 homolog B
823	UID897	chr4	NM_145368	49347483	49357881	49400944	49429251	+	+100k	-	AS	acyl-coenzyme A amino acid N-acyltransferase 2
824	UID898	chr4	NM_001033351	49750172	49760570	49686325	49866181	+	-100k	-	AS	glutamate receptor ionotropic, NMDA3A
825	UID898	chr4	NM_001004025	49750172	49760570	49699846	49703083	+	-100k	-	AS	protein phosphatase 3, regulatory subunit B,
826	UID898	chr4	NM_001163263	49750172	49760570	49653159	49677986	+	-100k	+	S	ring finger protein 20
827	UID898	chr4	NM_182999	49750172	49760570	49653159	49677986	+	-100k	+	S	ring finger protein 20
828	UID899	chr4	NM_001162865	51317589	51327987	51237777	51251028	+	-100k	+	S	cylicin, basic protein of sperm head
829	UID901	chr4	NM_139309	53687574	53698015	53735281	53784371	+	+50k	+	AS	fukutin
830	UID901	chr4	NM_176966	53687574	53698015	53652654	53672719	+	-50k	+	S	cystatin and DUF19 domain-containing protein 1
831	UID906	chr4	NM_021297	66258684	66269125	66314171	66329157	+	+100k	+	AS	toll-like receptor 4 precursor
832	UID917	chr4	NM_031202	80281032	80291473	80305460	80322949	+	+50k	+	AS	tyrosinase-related protein 1 precursor
833	UID920	chr4	NM_001081096	85937186	85947621	85915928	86029534	+	-50k	-	AS	hypothetical protein LOC75811
834	UID927	chr4	NM_027089	94380760	94391201	94399310	94420828	+	+20k	-	AS	acrosome formation associated factor precursor
835	UID927	chr4	NM_177239	94380760	94391201	94434058	94471118	+	+100k	-	AS	myb-like, SWIRM and MPN domains 1
836	UID928	chr4	NM_001113412	94999593	95009991	95049524	95418957	+	+50k	+	AS	FGGY carbohydrate kinase domain containing
837	UID928	chr4	NM_029347	94999593	95009991	95071438	95313587	+	+100k	+	AS	FGGY carbohydrate kinase domain containing
838	UID929	chr4	NM_010425	99220394	99230835	99148316	99150689	+	-100k	+	S	forkhead box D3
839	UID929	chr4	NM_001081264	99220394	99230835	99207647	99255478	+	-20k	+	S	dolichyl pyrophosphate Man9GlcNAc2
840	UID929	chr4	NM_026348	99220394	99230835	99257419	99321136	+	+50k	-	AS	integrin beta 3 binding protein
841	UID930	chr4	NM_177732	102768241	102778682	102669649	102712816	+	-100k	-	AS	solute carrier family 35 (UDP-glucuronic
842	UID930	chr4	NM_025909	102768241	102778682	102811777	102864360	+	+50k	+	AS	OMA1 homolog, zinc metallopeptidase precursor
843	UID930	chr4	NM_001163494	102768241	102778682	102728379	102788795	+	-50k	-	AS	hypothetical protein LOC70941 isoform 2
844	UID930	chr4	NM_027612	102768241	102778682	102728379	102788795	+	-50k	-	AS	hypothetical protein LOC70941 isoform 1
845	UID934	chr4	NM_183300	108195547	108206033	108137190	108221808	+	-100k	-	AS	zinc finger, FYVE domain containing 9
846	UID934	chr4	NM_177045	108195547	108206033	108117887	108132054	+	-100k	+	S	coiled-coil and C2 domain containing 1B
847	UID935	chr4	NM_013876	109033031	109043429	108950788	108974437	+	-100k	-	AS	ring finger protein 11
848	UID935	chr4	NM_026291	109033031	109043429	109003306	109029229	+	-50k	-	AS	hypothetical protein LOC67646
849	UID936	chr4	NM_001038698	109681895	109692339	109701668	109785443	+	+20k	-	AS	ELAV-like 4 isoform b
850	UID936	chr4	NM_001163399	109681895	109692339	109701669	109784766	+	+20k	-	AS	ELAV-like 4 isoform d
851	UID936	chr4	NM_010488	109681895	109692339	109701669	109784766	+	+20k	-	AS	ELAV-like 4 isoform a
852	UID936	chr4	NM_001163397	109681895	109692339	109701669	109849843	+	+20k	-	AS	ELAV-like 4 isoform c
853	UID937	chr4	NM_177406	114832135	114842576	114796977	114830747	+	-50k	+	S	cytochrome P450, family 4, subfamily a
854	UID937	chr4	NM_172306	114832135	114842576	114909555	114936966	+	+100k	+	AS	cytochrome P450, family 4, subfamily a family

855	UID937	chr4	NM_001100183	114832135	114842576	114740015	114752489	+	-100k	+	S	cytochrome P450, family 4, subfamily a
856	UID939	chr4	NM_001039595	142848670	142859153	142778029	142784518	+	-100k	+	S	pramel family member
857	UID939	chr4	NM_001113736	142848670	142859153	142802640	142809158	+	-50k	+	S	pramel family member
858	UID939	chr4	NM_001113735	142848670	142859153	142802640	142809158	+	-50k	+	S	pramel family member
859	UID939	chr4	NM_001113736	142848670	142859153	142777998	142784520	+	-100k	+	S	pramel family member
860	UID939	chr4	NM_001113735	142848670	142859153	142818386	142824923	+	-50k	+	S	pramel family member
861	UID939	chr4	NM_001113735	142848670	142859153	142777998	142784520	+	-100k	+	S	pramel family member
862	UID939	chr4	NM_001007579	142848670	142859153	142834153	142840485	+	-20k	+	S	hypothetical protein LOC329986
863	UID939	chr4	NM_001126325	142848670	142859153	142920446	142923933	+	+100k	-	AS	hypothetical protein LOC277668
864	UID939	chr4	NM_001126324	142848670	142859153	142881689	142885282	+	+50k	+	AS	hypothetical protein LOC279185
865	UID939	chr4	NM_001113736	142848670	142859153	142818386	142824923	+	-50k	+	S	pramel family member
866	UID940	chr4	NM_001085419	143435801	143448866	143366566	143376788	+	-100k	+	S	hypothetical protein LOC100038764
867	UID940	chr4	NM_198661	143435801	143448866	143457416	143463621	+	+50k	+	AS	oogenesis 2
868	UID940	chr4	NM_201258	143435801	143448866	143424243	143429338	+	-20k	-	AS	oogenesis 3
869	UID941	chr4	NM_001081248	143864956	143875439	143880393	143890085	+	+20k	+	AS	predicted gene 13177
870	UID941	chr4	NM_001085504	143864956	143875439	143936623	143953055	+	+100k	-	AS	hypothetical protein LOC230890
871	UID941	chr4	NM_001085542	143864956	143875439	143821686	143831821	+	-50k	-	AS	hypothetical protein LOC627085
872	UID941	chr4	NM_198662	143864956	143875439	143786508	143796040	+	-100k	+	S	arylacetamide deacetylase-like
873	UID942	chr4	NM_001126316	144080479	144090920	144043890	144053270	+	-50k	-	AS	hypothetical protein LOC329993
874	UID942	chr4	NM_011303	144080479	144090920	144159763	144194896	+	+100k	+	AS	dehydrogenase/reductase (SDR family) member 3
875	UID943	chr4	NM_001081248	143912016	143922499	143880393	143890085	-	-50k	+	AS	predicted gene 13177
876	UID943	chr4	NM_001085504	143912016	143922499	143936623	143953055	-	+50k	-	S	hypothetical protein LOC230890
877	UID943	chr4	NM_001085542	143912016	143922499	143821686	143831821	-	-100k	-	AS	hypothetical protein LOC627085
878	UID943	chr4	NM_001085536	143912016	143922499	143969877	143988091	-	+100k	-	S	hypothetical protein LOC546849
879	UID944	chr4	NM_001039595	142793390	142803831	142778029	142784518	-	-20k	+	AS	pramel family member
880	UID944	chr4	NM_001113736	142793390	142803831	142802640	142809158	-	+10k	+	AS	pramel family member
881	UID944	chr4	NM_001113735	142793390	142803831	142802640	142809158	-	+10k	+	AS	pramel family member
882	UID944	chr4	NM_173773	142793390	142803831	142703850	142716989	-	-100k	-	AS	oogenesis 4
883	UID944	chr4	NM_001113736	142793390	142803831	142777998	142784520	-	-20k	+	AS	pramel family member
884	UID944	chr4	NM_001113735	142793390	142803831	142818386	142824923	-	+50k	+	AS	pramel family member
885	UID944	chr4	NM_001113735	142793390	142803831	142777998	142784520	-	-20k	+	AS	pramel family member
886	UID944	chr4	NM_001007579	142793390	142803831	142834153	142840485	-	+50k	+	AS	hypothetical protein LOC329986
887	UID944	chr4	NM_001126324	142793390	142803831	142881689	142885282	-	+100k	+	AS	hypothetical protein LOC279185
888	UID944	chr4	NM_001113736	142793390	142803831	142818386	142824923	-	+50k	+	AS	pramel family member
889	UID946	chr4	NM_023865	122207800	122218244	122191561	122207438	-	-20k	+	AS	palmitoyl-protein thioesterase-like protein
890	UID947	chr4	NM_001033791	120745156	120755639	120813950	120822552	-	+100k	-	S	hypothetical protein LOC545677
891	UID948	chr4	NM_177406	114841410	114851851	114796977	114830747	-	-50k	+	AS	cytochrome P450, family 4, subfamily a,
892	UID948	chr4	NM_172306	114841410	114851851	114909555	114936966	-	+100k	+	AS	cytochrome P450, family 4, subfamily a family
893	UID949	chr4	NM_177818	111426628	111437069	111470858	111481052	-	+50k	+	AS	selection and upkeep of intraepithelial T cells
894	UID949	chr4	NM_001102662	111426628	111437069	111504200	111527470	-	+100k	+	AS	selection and upkeep of intraepithelial T cells
895	UID949	chr4	NM_001100466	111426628	111437069	111417486	111448288	-	-10k	+	AS	selection and upkeep of intraepithelial T cells
896	UID949	chr4	NM_001142775	111426628	111437069	111470858	111486151	-	+50k	+	AS	selection and upkeep of intraepithelial T cells
897	UID949	chr4	NM_145551	111426628	111437069	111373308	111400728	-	-100k	-	AS	solute carrier family 5 (sodium/glucose

898	UID950	chr4	NM_001048189	109966483	109976882	109895722	111155442	-	-100k	+	AS	carboxypeptidase 6, cytosolic isoform 2
899	UID950	chr4	NM_030231	109966483	109976882	109895722	111155442	-	-100k	+	AS	carboxypeptidase 6, cytosolic isoform 1
900	UID951	chr4	NM_001048189	109812438	109822879	109895722	111155442	-	+100k	+	AS	carboxypeptidase 6, cytosolic isoform 2
901	UID951	chr4	NM_030231	109812438	109822879	109895722	111155442	-	+100k	+	AS	carboxypeptidase 6, cytosolic isoform 1
902	UID954	chr4	NM_025909	102870632	102881073	102811777	102864360	-	-100k	+	AS	OMA1 homolog, zinc metallopeptidase precursor
903	UID955	chr4	NM_146146	101250497	101260895	101215338	101313286	-	-50k	+	AS	leptin receptor isoform 1
904	UID955	chr4	NM_010704	101250497	101260895	101215338	101290190	-	-50k	+	AS	leptin receptor isoform 2
905	UID955	chr4	NM_001122899	101250497	101260895	101215338	101311599	-	-50k	+	AS	leptin receptor isoform 3
906	UID955	chr4	NM_001033790	101250497	101260895	101332900	101341954	-	+100k	-	S	hypothetical protein LOC545662
907	UID957	chr4	NM_007704	98133588	98144074	98038651	98211621	-	-100k	+	AS	InaD-like isoform 3
908	UID957	chr4	NM_001005787	98133588	98144074	98038651	98181028	-	-100k	+	AS	InaD-like isoform 4
909	UID957	chr4	NM_001081202	98133588	98144074	98218771	98230504	-	+100k	+	AS	LINE-1 type transposase domain containing 1
910	UID958	chr4	NM_013690	94282606	94293004	94231317	94366957	-	-100k	+	AS	endothelial-specific receptor tyrosine kinase
911	UID959	chr4	NM_026319	94190318	94200759	94106537	94185251	-	-100k	+	AS	coiled-coil domain containing 2
912	UID959	chr4	NM_013690	94190318	94200759	94231317	94366957	-	+50k	+	AS	endothelial-specific receptor tyrosine kinase
913	UID959	chr4	NM_175305	94190318	94200759	94128677	94142162	-	-100k	-	AS	leucine rich repeat containing 19 precursor
914	UID964	chr4	NM_010486	90674737	90685178	90742784	90864073	-	+100k	-	S	ELAV-like 2 isoform 2
915	UID964	chr4	NM_207686	90674737	90685178	90742784	90864073	-	+100k	-	S	ELAV-like 2 isoform 3
916	UID964	chr4	NM_207685	90674737	90685178	90742784	90892002	-	+100k	-	S	ELAV-like 2 isoform 1
917	UID969	chr4	NM_029931	87144730	87155171	87241155	87277545	-	+100k	-	S	myeloid/lymphoid or mixed lineage-leukemia
918	UID969	chr4	NM_027326	87144730	87155171	87241155	87504638	-	+100k	-	S	myeloid/lymphoid or mixed lineage-leukemia
919	UID973	chr4	NM_026821	80431408	80441849	80381916	80425532	-	-50k	+	AS	hypothetical protein LOC52829
920	UID976	chr4	NM_011211	75395190	75405631	75412469	76065530	-	+20k	-	S	protein tyrosine phosphatase, receptor type, D
921	UID976	chr4	NM_001014288	75395190	75405631	75412469	75604707	-	+20k	-	S	protein tyrosine phosphatase, receptor type, D
922	UID978	chr4	NM_025849	74818967	74829403	74748584	74749517	-	-100k	-	AS	hypothetical protein LOC66928
923	UID979	chr4	NM_011599	71559275	71569716	71603502	71687280	-	+50k	-	S	transducin-like enhancer protein 1
924	UID988	chr4	NM_001009550	61645156	61655597	61634192	61637202	-	-20k	-	AS	major urinary protein 26
925	UID988	chr4	NM_009554	61645156	61655597	61675903	61694907	-	+50k	-	S	zinc finger protein 37
926	UID988	chr4	NM_001039544	61645156	61655597	61569837	61573673	-	-100k	-	AS	major urinary protein 3 precursor
927	UID989	chr4	NM_001037127	58478672	58489113	58380015	58468357	-	-100k	+	AS	skeletal muscle receptor tyrosine kinase isoform
928	UID989	chr4	NM_010944	58478672	58489113	58380015	58468357	-	-100k	+	AS	skeletal muscle receptor tyrosine kinase isoform
929	UID989	chr4	NM_172989	58478672	58489113	58529305	58647347	-	+100k	-	S	lysophosphatidic acid receptor 1
930	UID989	chr4	NM_010336	58478672	58489113	58529305	58647545	-	+100k	-	S	lysophosphatidic acid receptor 1
931	UID989	chr4	NM_001037128	58478672	58489113	58380015	58468357	-	-100k	+	AS	skeletal muscle receptor tyrosine kinase isoform
932	UID989	chr4	NM_001037130	58478672	58489113	58380015	58468357	-	-100k	+	AS	skeletal muscle receptor tyrosine kinase isoform
933	UID989	chr4	NM_001037129	58478672	58489113	58380015	58468357	-	-100k	+	AS	skeletal muscle receptor tyrosine kinase isoform
934	UID990	chr4	NM_011660	58105023	58115464	58037426	58050465	-	-100k	-	AS	thioredoxin 1
935	UID990	chr4	NM_026132	58105023	58115464	58078082	58103178	-	-50k	-	AS	thioredoxin domain containing 8
936	UID990	chr4	NM_022814	58105023	58115464	58136849	58300650	-	+50k	-	S	polydom precursor
937	UID994	chr4	NM_133891	53406915	53417356	53461512	53643578	-	+100k	+	AS	solute carrier family 44, member 1 isoform A
938	UID994	chr4	NM_001159633	53406915	53417356	53461512	53571264	-	+100k	+	AS	solute carrier family 44, member 1 isoform B
939	UID995	chr4	NM_025623	53072211	53082652	53033023	53043159	-	-50k	+	AS	nipsnap homolog 3B
940	UID995	chr4	NM_013454	53072211	53082652	53051888	53180995	-	-50k	-	AS	ATP-binding cassette 1, sub-family A, member 1

941	UID995	chr4	NM_146607	53072211	53082652	52991728	52992667	-	-100k	+	AS	olfactory receptor 270
942	UID995	chr4	NM_028529	53072211	53082652	53010383	53021954	-	-100k	+	AS	nipsnap homolog 3A
943	UID1001	chr4	NM_172688	32220184	32230583	32292719	32352077	-	+100k	+	AS	mitogen-activated protein kinase kinase kinase 7
944	UID1001	chr4	NM_009316	32220184	32230583	32292719	32352077	-	+100k	+	AS	mitogen-activated protein kinase kinase kinase 7
945	UID1008	chr4	NM_008899	22625727	22636168	22577628	22578966	-	-50k	-	AS	POU domain, class 3, transcription factor 2
946	UID1010	chr4	NM_010281	20258493	20268891	20164802	20188862	-	-100k	+	AS	gamma-glutamyl hydrolase precursor
947	UID1010	chr4	NM_172987	20258493	20268891	20334687	20869503	-	+100k	-	S	Na <sup>+</sup> /K <sup>+</sup> transporting ATPase interacting 3
948	UID1011	chr4	NM_028746	19670211	19680652	19745873	19769360	-	+100k	+	AS	aspartate/glutamate transporter 1
949	UID1012	chr4	NM_025476	19589881	19600279	19502213	19534079	-	-100k	+	AS	family with sequence similarity 82, member B
950	UID1012	chr4	NM_177327	19589881	19600279	19536819	19636140	-	-100k	-	AS	WW domain-containing protein 1
951	UID1017	chr4	NM_178617	14940366	14950762	14879392	15076278	-	-100k	-	AS	N-terminal EF-hand calcium binding protein 1
952	UID1020	chr4	NM_173746	12879660	12890099	12834004	12908618	-	-50k	+	AS	hypothetical protein LOC208820
953	UID1024	chr4	NM_013526	9848024	9858422	9771518	9789492	-	-100k	+	AS	growth differentiation factor 6 precursor
954	UID1024	chr4	NR_004448	9848024	9858422	9843111	9844544	-	-5k	-	AS	
955	UID1025	chr4	NM_001081417	8580494	8590935	8618067	8793956	-	+50k	+	AS	chromodomain helicase DNA binding protein 7
956	UID1026	chr4	NM_173426	5634808	5645252	5571325	5727091	-	-100k	+	AS	hypothetical protein LOC242297
957	UID1033	chr8	NM_007850	23064503	23074900	23121345	23122186	+	+100k	+	AS	alpha-defensin, 27 precursor
958	UID1033	chr8	NM_010039	23064503	23074900	23131341	23131513	+	+100k	+	AS	alpha-defensin, 28 precursor
959	UID1033	chr8	NM_001079933	23064503	23074900	23083727	23084427	+	+20k	+	AS	alpha-defensin, 26 precursor
960	UID1033	chr8	NM_183268	23064503	23074900	22974800	22975782	+	-100k	+	S	defensin-related cryptdin 20
961	UID1033	chr8	NR_003146	23064503	23074900	23160556	23161398	+	+100k	+	AS	
962	UID1036	chr8	NM_145841	39019481	39029964	38991070	40130025	+	-50k	-	AS	sarcoglycan zeta
963	UID1045	chr8	NM_001163564	69879866	69890264	69789205	69819553	+	-100k	+	S	nuclear assembly factor 1 homolog
964	UID1049	chr8	NM_145600	85706011	85716452	85653724	85664231	+	-100k	-	AS	zinc finger protein 330
965	UID1049	chr8	NM_177378	85706011	85716452	85753460	85974919	+	+50k	+	AS	ring finger protein 150 precursor
966	UID1053	chr8	NM_130457	115366814	115377257	115456019	115768684	+	+100k	+	AS	contactin associated protein-like 4 precursor
967	UID1054	chr8	NM_130457	115530296	115540737	115456019	115768684	-	-100k	+	AS	contactin associated protein-like 4 precursor
968	UID1063	chr8	NM_053200	95999314	96009712	96055199	96086932	-	+100k	-	S	carboxylesterase 3 precursor
969	UID1063	chr8	NM_133660	95999314	96009712	96090346	96118669	-	+100k	-	S	esterase 22 precursor
970	UID1063	chr8	NM_001013764	95999314	96009712	95909341	95937320	-	-100k	-	AS	hypothetical protein LOC244595
971	UID1063	chr8	NM_001081372	95999314	96009712	95945854	95969145	-	-100k	-	AS	predicted gene 5158
972	UID1063	chr8	NM_007954	95999314	96009712	95988145	96020411	-	-20k	-	AS	esterase 1 precursor
973	UID1064	chr8	NM_022428	95473608	95484091	95563529	95569208	-	+100k	+	AS	Iroquois related homeobox 6
974	UID1065	chr8	NM_026904	82654813	82665254	82607891	82673393	-	-50k	+	AS	anaphase promoting complex subunit 10
975	UID1065	chr8	NM_015751	82654813	82665254	82579513	82607812	-	-100k	-	AS	ATP-binding cassette, subfamily E, member 1
976	UID1066	chr8	NM_010442	78035261	78045205	77989689	77996664	-	-50k	+	AS	heme oxygenase (decyclizing) 1
977	UID1066	chr8	NM_008566	78035261	78045205	78005599	78024511	-	-50k	+	AS	minichromosome maintenance deficient 5, cell
978	UID1066	chr8	NM_029182	78035261	78045205	78110015	78120185	-	+100k	+	AS	RASD family, member 2 precursor
979	UID1071	chr8	NM_011922	65047602	65058043	64949662	65015260	-	-100k	-	AS	annexin A10 isoform 2
980	UID1071	chr8	NM_001136089	65047602	65058043	64949663	65015239	-	-100k	-	AS	annexin A10 isoform 1
981	UID1073	chr8	NM_010402	60282008	60292406	60213124	60216659	-	-100k	+	AS	heart and neural crest derivatives expressed
982	UID1073	chr8	NM_009136	60282008	60292406	60348064	60369727	-	+100k	+	AS	scrapie responsive gene 1 precursor
983	UID1073	chr8	NM_021788	60282008	60292406	60374843	60380002	-	+100k	-	S	sin3 associated polypeptide

984	UID1078	chr8	NM_026067	36966962	36977396	36933781	36964050	-	-50k	-	AS	three prime histone mRNA exonuclease 1
985	UID1078	chr8	NM_001081279	36966962	36977396	37056314	37147966	-	+100k	+	AS	malignant fibrous histiocytoma amplified
986	UID1081	chr8	NM_153135	30078747	30089144	30112652	30685572	-	+50k	-	S	unc-5 homolog D precursor
987	UID1087	chr5	NM_198620	8554395	8564836	8496341	8628958	+	-100k	-	AS	RUN domain containing 3B
988	UID1088	chr5	NM_011076	8655990	8666388	8666097	8754576	+	+20k	+	AS	ATP-binding cassette, subfamily B, member 1A
989	UID1089	chr5	NM_013657	17118115	17128556	17086639	17242091	+	-50k	+	S	semaphorin 3C precursor
990	UID1090	chr5	NM_001136060	27623925	27634366	27592870	28057268	+	-50k	+	S	dipeptidylpeptidase 6 isoform 1
991	UID1091	chr5	NM_020295	29504734	29515176	29560588	29709177	+	+100k	-	AS	limb region 1
992	UID1091	chr5	NM_021470	29504734	29515176	29528792	29556078	+	+50k	+	AS	ring finger protein 32
993	UID1099	chr5	NM_019468	62063969	62074410	62097079	62098714	+	+50k	+	AS	glucose-6-phosphate dehydrogenase 2
994	UID1103	chr5	NM_023784	69808086	69818527	69795812	69821767	+	-20k	-	AS	Yip1 domain family, member 7
995	UID1103	chr5	NM_172711	69808086	69818527	69836076	69852765	+	+50k	+	AS	GUF1 GTPase homolog
996	UID1103	chr5	NM_001038015	69808086	69818527	69854136	69871420	+	+50k	-	AS	glucosamine-6-phosphate deaminase 2
997	UID1105	chr5	NM_010252	71038255	71048738	71030181	71121752	+	-10k	-	AS	gamma-aminobutyric acid A receptor, gamma 1
998	UID1107	chr5	NM_001159518	78481390	78491831	78424016	78482820	+	-100k	-	AS	insulin-like growth factor binding protein 7
999	UID1107	chr5	NM_153798	78481390	78491831	78385258	78424102	+	-100k	+	S	DNA directed RNA polymerase II polypeptide B
1000	UID1107	chr5	NM_008048	78481390	78491831	78424016	78482820	+	-100k	-	AS	insulin-like growth factor binding protein 7
1001	UID1108	chr5	NR_027806	78608050	78618455	78585969	78586523	+	-50k	-	AS	
1002	UID1112	chr5	NM_001122668	96058812	96069246	96016171	96044532	+	-50k	+	S	hypothetical protein LOC665943
1003	UID1112	chr5	NM_198667	96058812	96069246	95972393	95976475	+	-100k	-	AS	hypothetical protein LOC381724
1004	UID1113	chr5	NM_172885	128162789	128173272	128072693	128747770	+	-100k	-	AS	transmembrane protein 132D precursor
1005	UID1114	chr5	NM_001105159	145732215	145742613	145812190	145838257	+	+100k	-	AS	cytochrome P450, family 3, subfamily a,
1006	UID1114	chr5	NM_017396	145732215	145742613	145812190	145838257	+	+100k	-	AS	cytochrome P450, family 3, subfamily a,
1007	UID1114	chr5	NM_007820	145732215	145742613	145689835	145723250	+	-50k	-	AS	cytochrome P450, family 3, subfamily a,
1008	UID1115	chr5	NM_001105159	145757139	145767537	145812190	145838257	+	+100k	-	AS	cytochrome P450, family 3, subfamily a,
1009	UID1115	chr5	NM_017396	145757139	145767537	145812190	145838257	+	+100k	-	AS	cytochrome P450, family 3, subfamily a,
1010	UID1115	chr5	NM_007820	145757139	145767537	145689835	145723250	+	-100k	-	AS	cytochrome P450, family 3, subfamily a,
1011	UID1116	chr5	NM_177879	141579361	141589759	141494007	142466265	-	-100k	+	AS	sidekick 1 precursor
1012	UID1117	chr5	NM_010294	97759015	97769456	97695462	97697310	-	-100k	-	AS	glycerol kinase 2
1013	UID1118	chr5	NM_144910	96253052	96263449	96317098	96402292	-	+100k	-	S	CCR4-NOT transcription complex, subunit 6-like
1014	UID1118	chr5	NM_178854	96253052	96263449	96316039	96402057	-	+100k	-	S	CCR4-NOT transcription complex, subunit 6-like
1015	UID1118	chr5	NM_018866	96253052	96263449	96197240	96201370	-	-100k	+	AS	chemokine (C-X-C motif) ligand 13 precursor
1016	UID1121	chr5	NM_007423	91609302	91619745	91565913	91584107	-	-50k	+	AS	alpha fetoprotein precursor
1017	UID1121	chr5	NM_009654	91609302	91619745	91536088	91551803	-	-100k	+	AS	albumin precursor
1018	UID1121	chr5	NM_028478	91609302	91619745	91678275	91715687	-	+100k	-	S	Ras association (RalGDS/AF-6) domain family
1019	UID1121	chr5	NM_145146	91609302	91619745	91594148	91628744	-	-20k	+	AS	afamin precursor
1020	UID1122	chr5	NM_145561	87436468	87446909	87377414	87447948	-	-100k	-	AS	transmembrane protease, serine 11d precursor
1021	UID1122	chr5	NM_001033233	87436468	87446909	87484970	87543551	-	+50k	-	S	transmembrane protease, serine 11a
1022	UID1129	chr5	NM_001018019	68377670	68388114	68310969	68445531	-	-100k	+	AS	glutaredoxin, cysteine rich 1
1023	UID1134	chr5	NM_181857	34357956	34368397	34324056	34486305	-	-50k	-	AS	DNA-directed DNA polymerase nu
1024	UID1134	chr5	NM_001001985	34357956	34368397	34312840	34322773	-	-50k	+	AS	N-acetyltransferase 8-like
1025	UID1134	chr5	NM_001033458	34357956	34368397	34300330	34301862	-	-100k	+	AS	hypothetical protein LOC381633
1026	UID1135	chr5	NM_001033457	29679291	29689732	29765453	29782956	-	+100k	+	AS	nucleolar protein with MIF4G domain 1-like



1027	UID1136	chr5	NM_001136060	27688675	27699158	27592870	28057268	-	-100k	+	AS	dipeptidylpeptidase 6 isoform 1
1028	UID1137	chr5	NM_001136060	27555017	27565416	27592870	28057268	-	+50k	+	AS	dipeptidylpeptidase 6 isoform 1
1029	UID1142	chr5	NM_011995	14551481	14561925	14520923	14869465	-	-50k	+	AS	piccolo isoform 1
1030	UID1142	chr5	NM_001110796	14551481	14561925	14520923	14802012	-	-50k	+	AS	piccolo isoform 2
1031	UID1144	chr5	NM_001163223	6741026	6751467	6775037	7350384	-	+50k	-	S	zinc finger protein 804B
1032	UID1146	chr5	NM_194462	3986547	3996988	3934191	4086210	-	-100k	+	AS	A kinase (PRKA) anchor protein (yotiao) 9
1033	UID1146	chr5	NM_001013023	3986547	3996988	3896586	3899939	-	-100k	-	AS	mitochondrial transcription termination factor
1034	UID1146	chr5	NM_172135	3986547	3996988	3896586	3899939	-	-100k	-	AS	mitochondrial transcription termination factor
1035	UID1150	chr17	NM_172827	17256444	17266885	17232340	17329107	+	-50k	-	AS	leucyl/cystinyl aminopeptidase
1036	UID1151	chr17	NM_001104575	22405278	22415676	22305847	22323833	+	-100k	+	S	vomeronasal receptor Vmn2r112
1037	UID1152	chr17	NM_008205	36312829	36323270	36248477	36250697	+	-100k	-	AS	histocompatibility 2, M region locus 9
1038	UID1152	chr17	NM_177636	36312829	36323270	36278060	36280250	+	-50k	-	AS	histocompatibility 2, M region locus 1
1039	UID1152	chr17	NM_177637	36312829	36323270	36380962	36384288	+	+100k	+	AS	histocompatibility 2, M region locus 10.5
1040	UID1153	chr17	NM_031863	40426043	40436484	40386538	40398035	+	-50k	-	AS	centromere protein Q
1041	UID1153	chr17	NM_008650	40426043	40436484	40398208	40424383	+	-50k	+	S	methylmalonyl-Coenzyme A mutase precursor
1042	UID1153	chr17	NM_001145060	40426043	40436484	40368224	40377834	+	-100k	-	AS	glycine N-acyltransferase-like protein 3
1043	UID1153	chr17	NM_027834	40426043	40436484	40338965	40344042	+	-100k	-	AS	hypothetical protein LOC71583
1044	UID1154	chr17	NM_001104582	55047852	55058293	55068358	55100690	+	+50k	-	AS	vomeronasal 2, receptor 118
1045	UID1155	chr17	NM_001081653	57381607	57392051	57454904	58095677	+	+100k	+	AS	contactin associated protein-like 5C precursor
1046	UID1156	chr17	NM_026497	58728252	58738690	58686731	58698653	+	-50k	-	AS	nudix-type motif 12
1047	UID1158	chr17	NM_009547	69226726	69237167	69288879	69295446	+	+100k	+	AS	zinc finger protein 161
1048	UID1158	chr17	NR_026848	69226726	69237167	69321348	69324092	+	+100k	+	AS	
1049	UID1163	chr17	NM_001112798	81254690	81265131	81281430	81646703	-	+50k	-	S	solute carrier family 8 (sodium/calcium
1050	UID1163	chr17	NM_011406	81254690	81265131	81281430	81646703	-	+50k	-	S	solute carrier family 8 (sodium/calcium
1051	UID1164	chr17	NM_009994	79548756	79559154	79615278	79623367	-	+100k	-	S	cytochrome P450, family 1, subfamily b,
1052	UID1164	chr17	NM_201361	79548756	79559154	79523225	79590478	-	-50k	+	AS	hypothetical protein LOC381110
1053	UID1169	chr17	NM_001104547	18305254	18315695	18286344	18302775	-	-20k	+	AS	vomeronasal 2, receptor 96
1054	UID1170	chr17	NM_001104539	17384279	17394678	17408558	17438785	-	+50k	+	AS	vomeronasal receptor Vmn2r90
1055	UID1178	chr9	NM_001011812	39190786	39201227	39144363	39145308	+	-50k	+	S	olfactory receptor 951
1056	UID1178	chr9	NM_146503	39190786	39201227	39176695	39177640	+	-20k	-	AS	olfactory receptor 952
1057	UID1178	chr9	NM_146331	39190786	39201227	39212003	39212948	+	+50k	+	AS	olfactory receptor 954
1058	UID1178	chr9	NM_207141	39190786	39201227	39220350	39221295	+	+50k	-	AS	olfactory receptor 955
1059	UID1178	chr9	NM_146830	39190786	39201227	39234774	39244559	+	+50k	-	AS	olfactory receptor 44
1060	UID1178	chr9	NM_146745	39190786	39201227	39261353	39262289	+	+100k	-	AS	olfactory receptor 957
1061	UID1179	chr9	NM_172444	59840373	59850817	59767724	59939141	+	-100k	-	AS	thrombospondin, type I, domain containing 4
1062	UID1179	chr9	NM_001040426	59840373	59850817	59767714	60309041	+	-100k	-	AS	thrombospondin, type I, domain containing 4
1063	UID1179	chr9	NM_013708	59840373	59850817	59740776	59748085	+	-100k	-	AS	nuclear receptor subfamily 2, group E, member 3
1064	UID1179	chr9	NM_001101600	59840373	59850817	59749299	59757049	+	-100k	+	S	hypothetical protein LOC665389
1065	UID1180	chr9	NM_001081153	73191249	73201647	73276555	73730699	+	+100k	-	AS	unc13 homolog 3
1066	UID1181	chr9	NM_144533	98057680	98068121	98105934	98220780	+	+50k	+	AS	nicotinamide mononucleotide adenyltransferase
1067	UID1183	chr9	NM_175025	105189440	105199838	105269461	105353217	+	+100k	-	AS	calcium-transporting ATPase 2C1
1068	UID1183	chr9	NM_025651	105189440	105199838	105253621	105263561	+	+100k	+	AS	asteroid homolog 1 isoform 1
1069	UID1184	chr9	NM_026179	122143028	122153257	122200313	122230221	+	+100k	+	AS	abhydrolase domain containing 5

1070	UID1185	chr9	NM_015793	109101424	109111822	109128530	109145082	-	+50k	-	S	F-box and WD-40 domain protein 14
1071	UID1185	chr9	NM_177598	109101424	109111822	109036632	109053381	-	-100k	-	AS	F-box and WD-40 domain protein 13
1072	UID1185	chr9	NM_001008428	109101424	109111822	109074837	109092130	-	-50k	-	AS	F-box and WD-40 domain protein 20
1073	UID1187	chr9	NM_177909	94444379	94454777	94479260	95038800	-	+50k	+	AS	solute carrier family 9 (sodium/hydrogen)
1074	UID1191	chr9	NM_175213	81726098	81736539	81660461	81824209	-	-100k	+	AS	hypothetical protein LOC75033
1075	UID1192	chr9	NM_009022	70987227	70997668	71014348	71094803	-	+50k	+	AS	aldehyde dehydrogenase 1A2
1076	UID1192	chr9	NM_022026	70987227	70997668	70909220	70961849	-	-100k	-	AS	aquaporin 9
1077	UID1194	chr9	NM_146869	38249418	38259862	38153446	38154400	-	-100k	+	AS	olfactory receptor 147
1078	UID1194	chr9	NM_001011806	38249418	38259862	38180854	38181790	-	-100k	+	AS	olfactory receptor 901
1079	UID1194	chr9	NM_146802	38249418	38259862	38199444	38200374	-	-50k	+	AS	olfactory receptor 902
1080	UID1194	chr9	NM_146801	38249418	38259862	38214613	38215546	-	-50k	+	AS	olfactory receptor 904
1081	UID1194	chr9	NM_146804	38249418	38259862	38223319	38224252	-	-50k	+	AS	olfactory receptor 905
1082	UID1194	chr9	NM_146803	38249418	38259862	38238601	38239537	-	-20k	+	AS	olfactory receptor 906
1083	UID1194	chr9	NM_146805	38249418	38259862	38249241	38250174	-	-5k	+	AS	olfactory receptor 907
1084	UID1194	chr9	NM_146872	38249418	38259862	38266604	38267536	-	+20k	+	AS	olfactory receptor 908
1085	UID1194	chr9	NM_146873	38249418	38259862	38274304	38275240	-	+50k	+	AS	olfactory receptor 909
1086	UID1194	chr9	NM_146811	38249418	38259862	38289467	38290400	-	+50k	+	AS	olfactory receptor 910
1087	UID1194	chr9	NM_146810	38249418	38259862	38330814	38332782	-	+100k	+	AS	olfactory receptor 912
1088	UID1194	chr9	NM_001011523	38249418	38259862	38344793	38345732	-	+100k	+	AS	olfactory receptor 913
1089	UID1195	chr9	NM_029299	27213386	27223826	27146266	27151156	-	-100k	+	AS	spermatogenesis associated 19 precursor
1090	UID1197	chr9	NM_146606	18540406	18550805	18505093	18506035	-	-50k	-	AS	olfactory receptor 24
1091	UID1197	chr9	NM_146605	18540406	18550805	18565755	18566694	-	+50k	-	S	olfactory receptor 828
1092	UID1197	chr9	NM_147067	18540406	18550805	18607028	18607994	-	+100k	+	AS	olfactory receptor 829
1093	UID1197	chr9	NM_146566	18540406	18550805	18625730	18626678	-	+100k	+	AS	olfactory receptor 830
1094	UID1201	chr7	NM_001111296	12691772	12702204	12633683	12673172	-	-100k	+	AS	bile-salt sulfotransferase 2A1
1095	UID1201	chr7	NM_009286	12691772	12702204	12633718	12673172	-	-100k	+	AS	sulfotransferase family 2A,
1096	UID1203	chr7	NM_207547	19312190	19322586	19296644	19297610	+	-20k	-	AS	vomer nasal 1 receptor, D21
1097	UID1204	chr7	NM_001034904	21531712	21542156	21618193	21630049	-	+100k	-	S	similar to serine/threonine kinase
1098	UID1204	chr7	NM_001034904	22754901	22765345	22841382	22853238	-	+100k	-	S	similar to serine/threonine kinase
1099	UID1205	chr7	NM_001034904	21531712	21542156	21618193	21630049	-	+100k	-	S	similar to serine/threonine kinase
1100	UID1205	chr7	NM_001034904	22754901	22765345	22841382	22853238	-	+100k	-	S	similar to serine/threonine kinase
1101	UID1207	chr7	NM_001105055	41615718	41626122	41610033	41645823	+	-10k	-	AS	vomer nasal receptor Vmn2r58
1102	UID1217	chr7	NM_172310	65595729	65606212	65523847	65571043	+	-100k	+	S	threonyl-tRNA synthetase-like 2
1103	UID1217	chr7	NM_026795	65595729	65606212	65572366	65580863	+	-50k	+	S	TM2 domain containing 3 isoform 1
1104	UID1217	chr7	NM_178056	65595729	65606212	65572366	65580863	+	-50k	+	S	TM2 domain containing 3 isoform 2
1105	UID1224	chr7	NM_017400	82084312	82094753	82048354	82183600	+	-50k	+	S	SH3-domain GRB2-like 3
1106	UID1226	chr7	NM_011661	87249819	87260302	87303165	87369172	+	+100k	-	AS	tyrosinase precursor
1107	UID1227	chr7	NM_001081414	87384637	87394872	87459537	88010439	+	+100k	+	AS	glutamate receptor, metabotropic 5 isoform a
1108	UID1227	chr7	NM_001143834	87384637	87394872	87459537	88010439	+	+100k	+	AS	glutamate receptor, metabotropic 5 isoform b
1109	UID1227	chr7	NM_011661	87384637	87394872	87303165	87369172	+	-100k	-	AS	tyrosinase precursor
1110	UID1229	chr7	NM_207556	103153871	103164269	103060423	103061362	+	-100k	+	S	olfactory receptor 592
1111	UID1229	chr7	NM_146380	103153871	103164269	103085682	103086666	+	-100k	+	S	olfactory receptor 593
1112	UID1229	chr7	NM_207143	103153871	103164269	103093540	103094476	+	-100k	+	S	olfactory receptor 594

1113	UID1229	chr7	NM_001001559	103153871	103164269	103123906	103126326	+	-50k	-	AS	deubiquitinating enzyme 2a
1114	UID1229	chr7	NM_001011845	103153871	103164269	103194233	103195181	+	+50k	+	AS	olfactory receptor 597
1115	UID1229	chr7	NM_001011793	103153871	103164269	103202308	103203268	+	+50k	+	AS	olfactory receptor 598
1116	UID1229	chr7	NM_146731	103153871	103164269	103211876	103212824	+	+100k	+	AS	olfactory receptor 599
1117	UID1229	chr7	NM_147046	103153871	103164269	103219802	103220747	+	+100k	-	AS	olfactory receptor 600
1118	UID1229	chr7	NM_146314	103153871	103164269	103232068	103233013	+	+100k	-	AS	olfactory receptor 601
1119	UID1230	chr7	NM_008219	103792643	103803126	103715458	103716983	+	-100k	-	AS	hemoglobin Z, beta-like embryonic chain
1120	UID1230	chr7	NM_008221	103792643	103803126	103725574	103727028	+	-100k	-	AS	hemoglobin Y, beta-like embryonic chain
1121	UID1230	chr7	NM_013616	103792643	103803126	103777277	103781357	+	-20k	+	S	olfactory receptor 65
1122	UID1230	chr7	NM_013618	103792643	103803126	103755126	103756062	+	-50k	-	AS	olfactory receptor 66
1123	UID1230	chr7	NM_013617	103792643	103803126	103766630	103768292	+	-50k	-	AS	olfactory receptor 64
1124	UID1230	chr7	NM_146959	103792643	103803126	103788882	103803732	+	-5k	+	S	olfactory receptor 631
1125	UID1230	chr7	NM_147119	103792643	103803126	103811202	103812156	+	+20k	+	AS	olfactory receptor 632
1126	UID1230	chr7	NM_146354	103792643	103803126	103820388	103821327	+	+50k	+	AS	olfactory receptor 633
1127	UID1230	chr7	NM_147118	103792643	103803126	103852996	103853962	+	+100k	+	AS	olfactory receptor 635
1128	UID1230	chr7	NM_147120	103792643	103803126	103877079	103878045	+	+100k	+	AS	olfactory receptor 638
1129	UID1230	chr7	NM_147084	103792643	103803126	103885570	103886521	+	+100k	-	AS	olfactory receptor 639
1130	UID1230	chr7	NM_001127686	103792643	103803126	103712944	103714342	+	-100k	-	AS	hypothetical protein LOC436003
1131	UID1231	chr7	NM_146329	103991103	104001545	103923228	103924173	+	-100k	-	AS	olfactory receptor 642
1132	UID1231	chr7	NM_146822	103991103	104001545	103895192	103896137	+	-100k	-	AS	olfactory receptor 640
1133	UID1231	chr7	NM_147072	103991103	104001545	103913618	103914557	+	-100k	+	S	olfactory receptor 641
1134	UID1231	chr7	NM_147077	103991103	104001545	103932476	103933421	+	-100k	-	AS	olfactory receptor 643
1135	UID1231	chr7	NM_147121	103991103	104001545	103941905	103942850	+	-50k	-	AS	olfactory receptor 644
1136	UID1231	chr7	NM_207144	103991103	104001545	103957951	103958899	+	-50k	-	AS	olfactory receptor 645
1137	UID1231	chr7	NM_147056	103991103	104001545	103980101	103981040	+	-20k	+	S	olfactory receptor 646
1138	UID1231	chr7	NM_198623	103991103	104001545	104014443	104017093	+	+50k	-	AS	ubiquilin 3
1139	UID1231	chr7	NM_198624	103991103	104001545	104022079	104024377	+	+50k	-	AS	ubiquilin-like
1140	UID1231	chr7	NM_172905	103991103	104001545	104026833	104038637	+	+50k	-	AS	hypothetical protein LOC244180
1141	UID1231	chr7	NM_146751	103991103	104001545	104053276	104054227	+	+100k	-	AS	olfactory receptor 648
1142	UID1231	chr7	NM_147055	103991103	104001545	104063087	104064026	+	+100k	-	AS	olfactory receptor 649
1143	UID1232	chr7	NM_007627	105221030	105231603	105299640	105310159	+	+100k	+	AS	cholecystinin B receptor
1144	UID1232	chr7	NM_001011533	105221030	105231603	105161915	105162881	+	-100k	+	S	olfactory receptor 688
1145	UID1232	chr7	NM_146750	105221030	105231603	105187826	105188789	+	-50k	+	S	olfactory receptor 689
1146	UID1232	chr7	NM_147061	105221030	105231603	105210566	105211535	+	-20k	-	AS	olfactory receptor 691
1147	UID1232	chr7	NM_146355	105221030	105231603	105242148	105243138	+	+50k	+	AS	olfactory receptor 692
1148	UID1232	chr7	NM_001033317	105221030	105231603	105278388	105282559	+	+100k	+	AS	cyclic nucleotide gated channel alpha 4
1149	UID1232	chr7	NM_199009	105221030	105231603	105252430	105273832	+	+50k	-	AS	hypothetical protein LOC74349
1150	UID1232	chr7	NM_020290	105221030	105231603	105203037	105204099	+	-20k	-	AS	olfactory receptor 690
1151	UID1233	chr7	NM_146197	119292772	119303213	119352859	119387740	+	+100k	+	AS	acyl-CoA synthetase medium-chain family member
1152	UID1233	chr7	NM_025989	119292772	119303213	119233692	119250421	+	-100k	-	AS	zymogen granule membrane glycoprotein 2
1153	UID1233	chr7	NM_178758	119292772	119303213	119317413	119334509	+	+50k	+	AS	acyl-CoA synthetase medium-chain family member 5
1154	UID1233	chr7	NM_009470	119292772	119303213	119254015	119270404	+	-50k	-	AS	uromodulin precursor
1155	UID1233	chr7	NM_027943	119292772	119303213	119277735	119314631	+	-20k	-	AS	protein disulfide isomerase-like, testis

1156	UID1234	chr7	NR_024051	120294785	120305226	120212849	120335960	+	-100k	+	S	
1157	UID1234	chr7	NR_024324	120294785	120305226	120388773	120389623	+	+100k	+	AS	
1158	UID1238	chr7	NM_146329	103900405	103910847	103923228	103924173	-	+50k	-	S	olfactory receptor 642
1159	UID1238	chr7	NM_147119	103900405	103910847	103811202	103812156	-	-100k	+	AS	olfactory receptor 632
1160	UID1238	chr7	NM_146354	103900405	103910847	103820388	103821327	-	-100k	+	AS	olfactory receptor 633
1161	UID1238	chr7	NM_147118	103900405	103910847	103852996	103853962	-	-50k	+	AS	olfactory receptor 635
1162	UID1238	chr7	NM_147120	103900405	103910847	103877079	103878045	-	-50k	+	AS	olfactory receptor 638
1163	UID1238	chr7	NM_147084	103900405	103910847	103885570	103886521	-	-20k	-	AS	olfactory receptor 639
1164	UID1238	chr7	NM_146822	103900405	103910847	103895192	103896137	-	-10k	-	AS	olfactory receptor 640
1165	UID1238	chr7	NM_147072	103900405	103910847	103913618	103914557	-	+20k	+	AS	olfactory receptor 641
1166	UID1238	chr7	NM_147077	103900405	103910847	103932476	103933421	-	+50k	-	S	olfactory receptor 643
1167	UID1238	chr7	NM_147121	103900405	103910847	103941905	103942850	-	+50k	-	S	olfactory receptor 644
1168	UID1238	chr7	NM_207144	103900405	103910847	103957951	103958899	-	+100k	-	S	olfactory receptor 645
1169	UID1238	chr7	NM_147056	103900405	103910847	103980101	103981040	-	+100k	+	AS	olfactory receptor 646
1170	UID1239	chr7	NM_001162477	97015131	97025581	96956942	97184143	-	-100k	+	AS	growth factor receptor bound protein
1171	UID1239	chr7	NM_010248	97015131	97025581	96956942	97184143	-	-100k	+	AS	growth factor receptor bound protein
1172	UID1243	chr7	NM_001011767	86440050	86450491	86341173	86342166	-	-100k	+	AS	olfactory receptor 299
1173	UID1243	chr7	NM_001011751	86440050	86450491	86364311	86365310	-	-100k	-	AS	olfactory receptor 298
1174	UID1243	chr7	NM_146618	86440050	86450491	86402519	86403452	-	-50k	+	AS	olfactory receptor 297
1175	UID1243	chr7	NM_146851	86440050	86450491	86461037	86461967	-	+50k	+	AS	olfactory receptor 295
1176	UID1243	chr7	NM_001011750	86440050	86450491	86491396	86492404	-	+100k	-	S	olfactory receptor 294
1177	UID1243	chr7	NM_001011752	86440050	86450491	86539424	86540435	-	+100k	+	AS	olfactory receptor 293
1178	UID1245	chr7	NM_017400	82027555	82037996	82048354	82183600	-	+50k	+	AS	SH3-domain GRB2-like 3
1179	UID1248	chr7	NM_130880	63251429	63261873	63323721	63637977	-	+100k	+	AS	OTU domain containing 7
1180	UID1253	chr7	NM_001037906	49921334	49931774	49843370	50731308	-	-100k	+	AS	protein kinase C-binding protein NELL1
1181	UID1254	chr7	NM_153101	47372885	47383284	47331828	47357604	-	-50k	-	AS	MAS-related GPR, member A2
1182	UID1254	chr7	NM_153067	47372885	47383284	47456971	47469393	-	+100k	-	S	MAS-related GPR, member A3
1183	UID1255	chr7	NM_207212	33748588	33759028	33818309	33842028	-	+100k	-	S	WT1-interacting protein
1184	UID1255	chr7	NM_001099330	33748588	33759028	33804190	33809597	-	+100k	+	AS	hypothetical protein LOC100043868
1185	UID1255	chr7	NM_178308	33748588	33759028	33651756	33653745	-	-100k	-	AS	androgen binding protein gamma
1186	UID1255	chr7	NM_001100464	33748588	33759028	33720691	33722702	-	-50k	-	AS	androgen binding protein beta
1187	UID1255	chr7	NM_009596	33748588	33759028	33730326	33731641	-	-20k	+	AS	androgen binding protein alpha
1188	UID1256	chr7	NM_207212	33748588	33759028	33818309	33842028	-	+100k	-	S	WT1-interacting protein
1189	UID1256	chr7	NM_001099330	33748588	33759028	33804190	33809597	-	+100k	+	AS	hypothetical protein LOC100043868
1190	UID1256	chr7	NM_178308	33748588	33759028	33651756	33653745	-	-100k	-	AS	androgen binding protein gamma
1191	UID1256	chr7	NM_001100464	33748588	33759028	33720691	33722702	-	-50k	-	AS	androgen binding protein beta
1192	UID1256	chr7	NM_009596	33748588	33759028	33730326	33731641	-	-20k	+	AS	androgen binding protein alpha
1193	UID1258	chr10	NM_026405	10272033	10282431	10235228	10248397	+	-50k	-	AS	RAB32
1194	UID1262	chr10	NM_020565	33507938	33518379	33547137	33568891	+	+50k	+	AS	sulfotransferase family 3A, member 1
1195	UID1262	chr10	NM_001101452	33507938	33518379	33455839	33471531	+	-100k	-	AS	hypothetical protein LOC215895
1196	UID1262	chr10	NM_001162957	33507938	33518379	33594526	33605437	+	+100k	+	AS	radial spoke head 4 homolog A
1197	UID1263	chr10	NM_009925	34121489	34131972	34079396	34086501	+	-50k	+	S	procollagen, type X, alpha 1 precursor
1198	UID1263	chr10	NM_010237	34121489	34131972	34172815	34300642	+	+100k	+	AS	fyn-related kinase

1199	UID1263	chr10	NM_001159544	34121489	34131972	34172815	34300642	+	+100k	+	AS	fyn-related kinase
1200	UID1272	chr10	NM_011595	85661523	85674381	85730210	85779304	+	+100k	+	AS	tissue inhibitor of metalloproteinase 3
1201	UID1275	chr10	NM_001039354	106767694	106778135	106675940	106829253	+	-100k	+	S	lin 7 homolog a isoform 1
1202	UID1275	chr10	NM_001033223	106767694	106778135	106675940	106829253	+	-100k	+	S	lin 7 homolog a isoform 2
1203	UID1279	chr10	NM_178609	110248780	110259013	110149574	110191494	+	-100k	+	S	E2F transcription factor 7
1204	UID1279	chr10	NM_172554	110248780	110259013	110347146	110414118	+	+100k	-	AS	zinc finger, DHHC domain containing 17
1205	UID1279	chr10	NM_007792	110248780	110259013	110324285	110343624	+	+100k	+	AS	cysteine and glycine-rich protein 2
1206	UID1281	chr10	NM_001161855	115425219	115435657	115515774	115518027	+	+100k	-	AS	RIKEN cDNA 4933416C03
1207	UID1281	chr10	NM_011217	115425219	115435657	115422472	115679039	+	-5k	+	S	protein tyrosine phosphatase, receptor type, R
1208	UID1283	chr10	NM_001033474	112269085	112279526	112329537	112333136	-	+100k	-	S	hypothetical protein LOC382423
1209	UID1284	chr10	NM_029134	102636227	102646671	102644088	102666010	-	+10k	-	S	leucine-rich repeats and IQ motif containing 1
1210	UID1285	chr10	NM_146240	101855574	101866018	101941909	101976248	-	+100k	+	AS	Ras association (RalGDS/AF-6) domain family
1211	UID1285	chr10	NM_024435	101855574	101866018	101911443	101920106	-	+100k	-	S	neurotensin
1212	UID1285	chr10	NM_026243	101855574	101866018	101804124	101821154	-	-100k	+	AS	alpha-1,3-mannosyl-glycoprotein
1213	UID1299	chr10	NM_175448	33260680	33271078	33201749	33314016	-	-100k	-	AS	retinaldehyde binding protein 1-like 2
1214	UID1300	chr10	NM_001002268	14172804	14182458	14092782	14235234	-	-100k	-	AS	G protein-coupled receptor 126 precursor
1215	UID1301	chr10	NM_009538	12686625	12697066	12780985	12821892	-	+100k	+	AS	pleiomorphic adenoma gene-like 1
1216	UID1301	chr10	NM_175102	12686625	12697066	12698647	12699380	-	+20k	+	AS	splicing factor 3b, subunit 5
1217	UID1301	chr10	NM_001163590	12686625	12697066	12630178	12654457	-	-100k	-	AS	syntaxin 11
1218	UID1301	chr10	NM_001163591	12686625	12697066	12630178	12654457	-	-100k	-	AS	syntaxin 11
1219	UID1301	chr10	NM_029075	12686625	12697066	12630178	12654457	-	-100k	-	AS	syntaxin 11
1220	UID1305	chr12	NM_011859	9649776	9660216	9600449	9607507	+	-50k	+	S	odd-skipped related 1
1221	UID1306	chr12	NM_173417	11211054	11221495	11116544	11176716	+	-100k	-	AS	potassium voltage-gated channel,
1222	UID1306	chr12	NM_177331	11211054	11221495	11267268	11292130	+	+100k	-	AS	Gen homolog 1, endonuclease
1223	UID1306	chr12	NM_025695	11211054	11221495	11292228	11346128	+	+100k	+	AS	SMC6 protein
1224	UID1306	chr12	NM_019544	11211054	11221495	11234724	11235291	+	+50k	-	AS	mesogenin 1
1225	UID1310	chr12	NM_001003719	56548388	56558829	56521028	56739297	+	-50k	-	AS	GTPase activating RANGAP domain-like 1 isoform
1226	UID1310	chr12	NM_001112714	56548388	56558829	56521028	56739297	+	-50k	-	AS	GTPase activating RANGAP domain-like 1 isoform
1227	UID1310	chr12	NM_019994	56548388	56558829	56521028	56739297	+	-50k	-	AS	GTPase activating RANGAP domain-like 1 isoform
1228	UID1310	chr12	NM_020287	56548388	56558829	56517046	56520147	+	-50k	+	S	insulinoma-associated 2
1229	UID1310	chr12	NR_003959	56548388	56558829	56483264	56484839	+	-100k	+	S	
1230	UID1311	chr12	NM_009216	59035841	59046239	59129815	59134048	+	+100k	+	AS	somatostatin receptor 1
1231	UID1317	chr12	NM_012024	76295716	76306158	76369720	76515040	+	+100k	-	AS	epsilon isoform of regulatory subunit B56,
1232	UID1317	chr12	NM_023275	76295716	76306158	76227152	76320295	+	-100k	+	S	ras homolog gene family, member J precursor
1233	UID1317	chr12	NM_175644	76295716	76306158	76330559	76335621	+	+50k	-	AS	glycoprotein hormone beta 5 precursor
1234	UID1323	chr12	NM_173023	101845175	101855618	101805731	102026998	+	-50k	+	S	cation channel, sperm-associated, beta
1235	UID1325	chr12	NM_001163136	119956745	119967188	119887511	119911032	-	-100k	+	AS	metastasis associated in colon cancer 1
1236	UID1328	chr12	NM_001081169	112501491	112511974	112554490	112575381	-	+100k	+	AS	60 kDa lysophospholipase
1237	UID1328	chr12	NM_027360	112501491	112511974	112409183	112414785	-	-100k	-	AS	6.8 kDa mitochondrial proteolipid
1238	UID1328	chr12	NM_001097621	112501491	112511974	112594015	112629555	-	+100k	+	AS	kinesin family member 26A
1239	UID1328	chr12	NM_001127685	112501491	112511974	112427130	112428559	-	-100k	-	AS	hypothetical protein LOC217874
1240	UID1328	chr12	NM_029056	112501491	112511974	112419366	112516662	-	-100k	+	AS	tudor domain containing 9
1241	UID1329	chr12	NM_013747	102806141	102816582	102870959	102898957	-	+100k	+	AS	golgi autoantigen, golgin subfamily a, 5

1242	UID1329	chr12	NM_011175	102806141	102816582	102795147	102840747	-	-20k	-	AS	legumain precursor
1243	UID1330	chr12	NM_183186	99542039	99552480	99596143	99851124	-	+100k	-	S	checkpoint suppressor 1
1244	UID1331	chr12	NM_027076	96395131	96405565	96442445	96443053	-	+50k	-	S	hypothetical protein LOC69423
1245	UID1332	chr12	NM_201518	96006223	96016664	96088056	96181042	-	+100k	+	AS	fibronectin leucine rich transmembrane protein
1246	UID1342	chr12	NM_029760	53030411	53040852	53019365	53232579	-	-20k	+	AS	nucleotide binding protein-like
1247	UID1342	chr12	NM_008159	53030411	53040852	52944625	52949683	-	-100k	-	AS	G protein-coupled receptor 33
1248	UID1347	chr12	NM_015763	16647197	16657638	16561148	16615250	-	-100k	-	AS	lipin 1 isoform b
1249	UID1347	chr12	NM_172950	16647197	16657638	16561148	16615250	-	-100k	-	AS	lipin 1 isoform a
1250	UID1347	chr12	NM_015764	16647197	16657638	16696094	16826366	-	+50k	-	S	Greb1 protein
1251	UID1347	chr12	NM_008747	16647197	16657638	16678949	16685716	-	+50k	+	AS	neurotensin receptor 2
1252	UID1347	chr12	NM_001130412	16647197	16657638	16561148	16615250	-	-100k	-	AS	lipin 1 isoform a
1253	UID1352	chr6	NM_028990	13443291	13453732	13530688	13558063	+	+100k	-	AS	transmembrane protein 168
1254	UID1357	chr6	NM_028459	24620366	24630804	24563814	24614981	+	-100k	-	AS	Wiskott-Aldrich syndrome-like
1255	UID1357	chr6	NM_029848	24620366	24630804	24698376	24716529	+	+100k	+	AS	hyaluronoglucosaminidase 4
1256	UID1357	chr6	NM_053098	24620366	24630804	24547780	24555424	+	-100k	+	S	leiomodoin 2 (cardiac)
1257	UID1357	chr6	NM_028920	24620366	24630804	24683254	24695462	+	+100k	+	AS	hyaluronoglucosaminidase 6
1258	UID1360	chr6	NM_001081678	28125131	28135531	28189940	28211611	+	+100k	-	AS	zinc finger protein 800
1259	UID1362	chr6	NM_172728	53407679	53418074	53502951	53625410	+	+100k	+	AS	cAMP responsive element binding protein 5
1260	UID1363	chr6	NM_053235	57214376	57224817	57139435	57140338	+	-100k	+	S	vomeronasal 1 receptor, C5
1261	UID1363	chr6	NM_053237	57214376	57224817	57163016	57163928	+	-100k	+	S	vomeronasal 1 receptor, C7
1262	UID1363	chr6	NM_053236	57214376	57224817	57187726	57188626	+	-50k	+	S	vomeronasal 1 receptor, C6
1263	UID1363	chr6	NM_134184	57214376	57224817	57252301	57253213	+	+50k	-	AS	vomeronasal 1 receptor, C29
1264	UID1363	chr6	NM_134171	57214376	57224817	57290044	57290956	+	+100k	-	AS	vomeronasal 1 receptor, C16
1265	UID1369	chr6	NM_019455	65142357	65152798	65046871	65074308	+	-100k	-	AS	prostaglandin D2 synthase, hematopoietic
1266	UID1370	chr6	NM_175524	65244728	65255170	65310871	65387728	+	+100k	+	AS	hypothetical protein LOC243407
1267	UID1372	chr6	NM_009042	78411784	78422215	78355491	78358175	+	-100k	+	S	regenerating islet-derived 1 precursor
1268	UID1372	chr6	NM_009043	78411784	78422215	78334663	78337606	+	-100k	+	S	regenerating islet-derived 2 precursor
1269	UID1372	chr6	NM_011260	78411784	78422215	78395776	78398383	+	-20k	-	AS	regenerating islet-derived 3 gamma precursor
1270	UID1379	chr6	NM_001014997	129820118	129830562	129732339	129741542	+	-100k	-	AS	killer cell lectin-like receptor subfamily H,
1271	UID1379	chr6	NM_008463	129820118	129830562	129864680	129878917	+	+50k	-	AS	killer cell lectin-like receptor, subfamily A,
1272	UID1379	chr6	NM_133203	129820118	129830562	129796846	129842363	+	-50k	-	AS	killer cell lectin-like receptor, subfamily A,
1273	UID1380	chr6	NM_177787	137985512	137995920	137947785	138037394	+	-50k	-	AS	solute carrier family 15, member 5
1274	UID1381	chr6	NM_011216	137190841	137201240	137216660	137427428	-	+50k	+	AS	protein tyrosine phosphatase, receptor type, O
1275	UID1383	chr6	NM_021899	122874054	122884540	122786129	122810980	-	-100k	+	AS	forkhead box J2
1276	UID1383	chr6	NM_009779	122874054	122884540	122812758	122821776	-	-100k	-	AS	complement component 3a receptor 1
1277	UID1383	chr6	NM_026267	122874054	122884540	122840175	122854560	-	-50k	+	AS	NECAP endocytosis associated 1
1278	UID1383	chr6	NM_199311	122874054	122884540	122887476	122900238	-	+20k	+	AS	C-type lectin domain family 4, member a1
1279	UID1383	chr6	NM_153197	122874054	122884540	122918262	122935493	-	+50k	+	AS	dendritic cell inhibitory receptor 3
1280	UID1383	chr6	NM_001005860	122874054	122884540	122955985	122989724	-	+100k	+	AS	C-type lectin domain family 4, member a4
1281	UID1386	chr6	NM_010585	108230670	108241153	108178872	108516887	-	-100k	+	AS	inositol 1,4,5-triphosphate receptor 1
1282	UID1389	chr6	NM_001102670	95174633	95185073	95083368	95095250	-	-100k	+	AS	T-cell activation kelch repeat protein isoform
1283	UID1389	chr6	NM_001008785	95174633	95185073	95083368	95095250	-	-100k	+	AS	T-cell activation kelch repeat protein isoform
1284	UID1390	chr6	NM_011684	89992005	90002446	89897153	89906011	-	-100k	-	AS	vomeronasal 1 receptor, A2

1285	UID1390	chr6	NM_053229	89992005	90002446	89941674	89942604	-	-100k	+	AS	vomeronasal 1 receptor, B8
1286	UID1390	chr6	NM_053219	89992005	90002446	89987391	89988324	-	-5k	+	AS	vomeronasal 1 receptor, A4
1287	UID1390	chr6	NM_053218	89992005	90002446	90001436	90002345	-	+10k	-	S	vomeronasal 1 receptor, A3
1288	UID1390	chr6	NM_053225	89992005	90002446	90072778	90073711	-	+100k	+	AS	vomeronasal 1 receptor, B1
1289	UID1390	chr6	NM_011683	89992005	90002446	90088146	90096149	-	+100k	+	AS	vomeronasal 1 receptor, A1
1290	UID1390	chr6	NM_011911	89992005	90002446	90037589	90038522	-	+50k	-	S	vomeronasal 1, receptor B2
1291	UID1392	chr6	NM_134169	66577103	66587501	66541228	66542146	-	-50k	-	AS	vomeronasal 1 receptor, C14
1292	UID1392	chr6	NM_134167	66577103	66587501	66608371	66609262	-	+50k	-	S	vomeronasal 1 receptor, C12
1293	UID1392	chr6	NM_134166	66577103	66587501	66645549	66646467	-	+100k	-	S	vomeronasal 1 receptor, C11
1294	UID1392	chr6	NM_134165	66577103	66587501	66660969	66661878	-	+100k	+	AS	vomeronasal 1 receptor, C10
1295	UID1392	chr6	NM_134170	66577103	66587501	66481760	66489286	-	-100k	-	AS	vomeronasal 1 receptor, C15
1296	UID1398	chr6	NM_134177	58353362	58363760	58364514	58365423	-	+20k	-	S	vomeronasal 1 receptor, C22
1297	UID1409	chr16	NM_001013761	26779374	26789815	26872467	26905207	+	+100k	-	AS	hypothetical protein LOC239789
1298	UID1410	chr16	NM_175548	41492452	41502893	41452673	42065545	+	-50k	+	S	limbic system-associated membrane protein
1299	UID1417	chr16	NM_173069	69772816	69783258	69739515	69746386	+	-50k	-	AS	spermatogenesis associated glutamate (E)-rich
1300	UID1425	chr16	NM_018778	88413474	88423915	88449684	88452042	+	+50k	-	AS	claudin 8
1301	UID1425	chr16	NM_181490	88413474	88423915	88394665	88395837	+	-20k	-	AS	claudin 17
1302	UID1425	chr16	NM_001163141	88413474	88423915	88499567	88501138	+	+100k	-	AS	keratin associated protein 24-1
1303	UID1426	chr16	NM_028621	89216033	89226474	89291885	89292633	+	+100k	-	AS	keratin associated protein 16-7
1304	UID1426	chr16	NM_010673	89216033	89226474	89308181	89308970	+	+100k	-	AS	keratin associated protein 6-2
1305	UID1427	chr16	NM_001113406	89522436	89532877	89459034	89460042	+	-100k	-	AS	keratin associated protein 11-1
1306	UID1429	chr16	NM_009621	85601720	85612118	85683023	85692311	-	+100k	-	S	a disintegrin-like and metalloprotease
1307	UID1433	chr16	NM_175549	73873550	73883991	73774985	74293592	-	-100k	-	AS	roundabout homolog 2
1308	UID1438	chr16	NM_007938	59639460	59649903	59595738	60547787	-	-50k	-	AS	Eph receptor A6
1309	UID1438	chr16	NM_019665	59639460	59649903	59555576	59581595	-	-100k	-	AS	ADP-ribosylation factor-like 6
1310	UID1439	chr16	NM_146397	59112794	59123235	59016410	59017334	-	-100k	-	AS	olfactory receptor 190
1311	UID1439	chr16	NM_001011807	59112794	59123235	59027807	59028737	-	-100k	-	AS	olfactory receptor 191
1312	UID1439	chr16	NM_207549	59112794	59123235	59040321	59041246	-	-100k	-	AS	olfactory receptor 192
1313	UID1439	chr16	NM_001011791	59112794	59123235	59051934	59052864	-	-100k	-	AS	olfactory receptor 193
1314	UID1439	chr16	NM_001005524	59112794	59123235	59061403	59062324	-	-100k	-	AS	olfactory receptor 194
1315	UID1439	chr16	NM_146998	59112794	59123235	59091107	59092034	-	-50k	+	AS	olfactory receptor 195
1316	UID1439	chr16	NM_146779	59112794	59123235	59109467	59110397	-	-5k	-	AS	olfactory receptor 196
1317	UID1439	chr16	NM_146484	59112794	59123235	59127811	59128737	-	+20k	-	S	olfactory receptor 197
1318	UID1439	chr16	NM_001011808	59112794	59123235	59143759	59144680	-	+50k	-	S	olfactory receptor 198
1319	UID1439	chr16	NM_146994	59112794	59123235	59210994	59211921	-	+100k	-	S	olfactory receptor 201
1320	UID1439	chr16	NM_207550	59112794	59123235	59157941	59158867	-	+50k	-	S	olfactory receptor 199
1321	UID1443	chr16	NM_026439	44968523	44978922	45013384	45047256	-	+50k	+	AS	steroid-sensitive protein 1 precursor
1322	UID1443	chr16	NM_028756	44968523	44978922	45058904	45078005	-	+100k	-	S	solute carrier family 35, member A5
1323	UID1448	chr14	NM_177624	12431524	12442007	12464142	12476415	+	+50k	+	AS	sentan
1324	UID1449	chr14	NM_177624	12484584	12495025	12464142	12476415	+	-50k	+	S	sentan
1325	UID1455	chr14	NM_177816	39750484	39760882	39724580	39801678	+	-50k	-	AS	SH2 domain containing 4B
1326	UID1455	chr14	NM_145928	39750484	39760882	39815156	39875520	+	+100k	-	AS	tetraspanin 14
1327	UID1456	chr14	NM_013542	55146899	55157340	55212927	55216331	+	+100k	-	AS	granzyme B precursor

1328	UID1456	chr14	NM_010373	55146899	55157340	55071689	55074696	+	-100k	-	AS	granzyme E precursor
1329	UID1456	chr14	NM_010372	55146899	55157340	55083638	55086664	+	-100k	-	AS	granzyme D
1330	UID1456	chr14	NM_010375	55146899	55157340	55110651	55113650	+	-50k	-	AS	granzyme G precursor
1331	UID1456	chr14	NM_153052	55146899	55157340	55119866	55128667	+	-50k	-	AS	granzyme N
1332	UID1456	chr14	NM_010374	55146899	55157340	55159333	55165478	+	+20k	-	AS	granzyme F precursor
1333	UID1456	chr14	NM_007800	55146899	55157340	55053951	55056645	+	-100k	-	AS	cathepsin G preproprotein
1334	UID1456	chr14	NM_010371	55146899	55157340	55185471	55188727	+	+50k	-	AS	granzyme C preproprotein
1335	UID1458	chr14	NM_027436	59826361	59836802	59738675	59857723	+	-100k	+	S	mitochondrial intermediate peptidase precursor
1336	UID1458	chr14	NM_013869	59826361	59836802	59918145	60000579	+	+100k	-	AS	tumor necrosis factor receptor superfamily,
1337	UID1469	chr14	NM_145467	122741399	122751840	122795319	123109259	+	+100k	+	AS	integrin, beta-like 1 precursor
1338	UID1488	chr14	NM_013542	55141405	55151846	55212927	55216331	-	+100k	-	S	granzyme B precursor
1339	UID1488	chr14	NM_010373	55141405	55151846	55071689	55074696	-	-100k	-	AS	granzyme E precursor
1340	UID1488	chr14	NM_010372	55141405	55151846	55083638	55086664	-	-100k	-	AS	granzyme D
1341	UID1488	chr14	NM_010375	55141405	55151846	55110651	55113650	-	-50k	-	AS	granzyme G precursor
1342	UID1488	chr14	NM_153052	55141405	55151846	55119866	55128667	-	-50k	-	AS	granzyme N
1343	UID1488	chr14	NM_010374	55141405	55151846	55159333	55165478	-	+20k	-	S	granzyme F precursor
1344	UID1488	chr14	NM_007800	55141405	55151846	55053951	55056645	-	-100k	-	AS	cathepsin G preproprotein
1345	UID1488	chr14	NM_010371	55141405	55151846	55185471	55188727	-	+50k	-	S	granzyme C preproprotein
1346	UID1489	chr14	NM_146494	48799343	48809784	48816208	48823892	-	+20k	-	S	olfactory receptor 722
1347	UID1489	chr14	NM_001011530	48799343	48809784	48850563	48851493	-	+100k	-	S	olfactory receptor 723
1348	UID1489	chr14	NM_146492	48799343	48809784	48882091	48883021	-	+100k	-	S	olfactory receptor 724
1349	UID1491	chr14	NM_007479	25530431	25540872	25471380	25490442	-	-100k	+	AS	ADP-ribosylation factor 4
1350	UID1491	chr14	NM_178668	25530431	25540872	25497300	25503030	-	-50k	-	AS	2'-phosphodiesterase
1351	UID1497	chrY	NM_011667	85740	96181	155155	180667	+	+100k	+	AS	ubiquitin-activating enzyme E1, Chr Y 1
1352	UID1497	chrY	NM_009570	85740	96181	61649	133852	+	-50k	-	AS	zinc finger protein 1, Y linked
1353	UID1498	chrY	NM_012011	332352	342793	347054	365037	+	+20k	+	AS	eukaryotic translation initiation factor 2,
1354	UID1498	chrY	NM_011419	332352	342793	234230	280254	+	-100k	+	S	jumonji, AT rich interactive domain 1D (Rbp2
1355	UID1498	chrY	NR_027507	332352	342793	392206	395311	+	+100k	-	AS	
1356	UID1499	chrY	NM_009571	1481822	1492263	1391082	1455317	-	-100k	-	AS	zinc finger protein 2, Y linked