

	GENE	PRODUCT	Mb
1	tim10	mitochondrial import inner membrane translocase subunit Tim10	43,69
2	unc93b1	protein unc-93 homolog B1	43,69
3	cryba1l2	crystallin beta A1 like 2	43,72
4	crybb1 l2	crystallin beta B1 like 2	43,74
5	rtn4rl2a	reticulon 4 receptor-like 2 a precursor	43,79
6	zdhhc5a	zinc finger DHHC-type containing 5a	43,84
7	tmx2b	thioredoxin-related transmembrane protein 2-B precursor	43,87
8	med19b	mediator of RNA polymerase II transcription subunit 19-B	43,88
9	slc43a1b	large neutral amino acids transporter small subunit 3	43,89
10	si:dkey-28b4.7	DNA polymerase subunit delta-4	44,01
11	p2rx3b	P2X purinoceptor 3	44,04
12	si:dkey-9i23.4	uncharacterized protein LOC571855 precursor	44,07
13	si:dkey-9i23.5	uncharacterized protein LOC571862 precursor	44,08
14	ndufs8a	NADH dehydrogenase [ubiquinone] iron-sulfur protein 8 mitochondrial	44,11
15	zgc:165520	uncharacterized protein LOC571872	44,13
16	kdm2aa	lysine (K)-specific demethylase 2B	44,14
17	si:dkey-9i23.15	uncharacterized protein LOC555790 precursor	44,22
18	tmem176	transmembrane protein 176	44,23
19	si:dkey-9i23.16	uncharacterized protein LOC571915	44,24
20	vps37c	vacuolar protein sorting-associated protein 37C	44,25
21	dnaja1l	dnaJ homolog subfamily A member 1	44,30
22	rps6	40S ribosomal protein S6	44,34
23	zgc:56382	uncharacterized protein LOC406670 precursor	44,47
24	zgc:111983	uncharacterized protein LOC550501 precursor	44,47
25	ddx39aa	DEAD (Asp-Glu-Ala-Asp) box polypeptide 39Aa	44,50
26	emp1	epithelial membrane protein 1	44,63
27	zgc:101679	factor VIII intron 22 protein	44,64
28	si:ch211-243a20.3	uncharacterized protein LOC100151507 precursor	44,66
29	grin2bb	glutamate [NMDA] receptor subunit epsilon-2	44,68
30	atf7ip	activating transcription factor 7-interacting protein 1	44,88
31	sept3	neuronal-specific septin-3	44,93
32	serhl	serine hydrolase-like protein	44,96
33	trappc5	trafficking protein particle complex subunit 5	44,97
34	mcoln1	mucolin 1	44,98
35	si:ch211-214c7.5	UPF0575 protein C19orf67 homolog	45,05
36	map2k7	dual specificity mitogen-activated protein kinase kinase 7	45,15
37	lipt1	lipoyltransferase 1 mitochondrial	45,23
38	arhgef7b	Rho guanine nucleotide exchange factor (GEF) 7b	45,27
39	sox1b	transcription factor Sox-1b	45,50
40	tubgcp	gamma-tubulin complex component 3	45,71
41	si:busm1-105i16.2	uncharacterized protein LOC368709 isoform 2	45,81
42	zgc:174719	uncharacterized protein LOC100137112	45,81
43	cab39l	calcium-binding protein 39-like	45,91
44	cdadc1	cytidine and dCMP deaminase domain-containing protein 1	45,93
45	rcbtb1	RCC1 and BTB domain-containing protein 1	45,94
46	arl1l	ADP-ribosylation factor-like protein 11	45,96
47	ebpl	emopamil-binding protein-like	45,97
48	kpna3	importin subunit alpha-3	45,98
49	spryd7a	chromosome 13 open reading frame 1	46,02
50	mir16b	microRNA	46,03
51	mir15a-1	microRNA	46,03
52	si:ch73-160h15.3	leukemia-associated protein 7	46,14
53	agpat3	1-acyl-sn-glycerol-3-phosphate acyltransferase gamma	46,15
54	pdxkb	pyridoxal kinase	46,20
55	itsn1	intersectin-1	46,31
56	cryz1l	quinone oxidoreductase-like protein 1	46,40
57	setd4	SET domain-containing protein 4	46,42
58	zgc:162351	uncharacterized protein LOC100038770 precursor	46,43
59	si:ch211-287j19.6	uncharacterized protein LOC565708 precursor	46,43
60	mhc1zda	major histocompatibility complex class I ZDA precursor	46,43
61	zgc:136614	uncharacterized protein LOC664757 precursor	46,45

62	zgc:111893	uncharacterized protein LOC556341 precursor	46,45
63	mhc1zba	major histocompatibility complex class I ZE like precursor	46,46
64	mhc1zha	major histocompatibility complex class I ZHA precursor	46,47
65	cbr1	carbonyl reductase [NADPH] 1	46,47
66	more3b	MORC family CW-type zinc finger 3b	46,49
67	bcl9	B-cell CLL/lymphoma 9 protein	46,70
68	cx41.8	connexin 41.8	46,72
69	cx44.1	gap junction alpha-8 protein	46,75
70	fstl1a	follistatin-like 1a precursor	46,77
71	lrcc58a	leucine rich repeat containing 58	46,79
72	obfc1	CST complex subunit STN1	46,81
73	sh3pxd2aa	SH3 and PX domain-containing protein 2A	46,89
74	neur11aa	E3 ubiquitin-protein ligase NEURL1	47,01
75	cfap58	coiled-coil domain-containing protein 147	47,14
76	cxcl18b	chemokine (C-X-C motif) ligand 18b precursor	48,58
77	msxb	homeobox protein MSH-B	48,71
78	si:dkeyp-80c12.7	uncharacterized protein LOC557882	48,73
79	taf5	transcription initiation factor TFIID subunit 5	48,77
80	si:dkeyp-80c12.10	up-regulated during skeletal muscle growth protein 5	48,79
81	pdc11	protein RRP5 homolog	48,79
82	zgc:175214	ring finger protein 122-like	48,84
83	si:ch211-281g13.5	probable E3 ubiquitin-protein ligase HERC4-like	48,88
84	zgc:163136	uncharacterized protein LOC100073325	48,89
85	si:ch211-281g13.4	si:ch211-281g13.4	48,90
86	col17a1a	collagen type XVII alpha 1a	48,92
87	slkb	non-coding RNA	48,96
88	tsga10	testis-specific gene 10 protein	49,01
89	lef1	lymphoid enhancer-binding factor 1	49,17
90	hadh	hydroxyacyl-coenzyme A dehydrogenase mitochondrial	49,27
91	cyp2u1	cytochrome P450 2U1	49,28
92	sgms2	phosphatidylcholine:ceramide cholinephosphotransferase 2	49,29
93	gstcd	glutathione S-transferase C-terminal domain-containing protein	49,31
94	npnt	nephronectin precursor	49,44
95	tbck	TBC domain-containing protein kinase-like protein	49,55
96	aimp1	aminoacyl tRNA synthase complex-interacting multifunctional protein 1	49,65
97	dkk2	dickkopf-related protein 2 precursor	49,75
98	papss1	bifunctional 3'-phosphoadenosine 5'-phosphosulfate synthase 1	49,84
99	pkd2	polycystin-2	49,90
100	abcg2d	ATP-binding cassette sub-family G member 2	49,92
101	ppm1k	protein phosphatase 1K (PP2C domain containing)	49,95
102	herc3	probable E3 ubiquitin-protein ligase HERC3	50,00
103	zgc:154142	uncharacterized protein LOC555481	50,15
104	otx1a	homeobox protein OTX1 A	50,28
105	mdh1aa	malate dehydrogenase 1Aa NAD (soluble)	50,33
106	mdh1aa	malate dehydrogenase 1Aa NAD (soluble)	50,33
107	mdh1aa	malate dehydrogenase 1Aa NAD (soluble)	50,33
108	ugp2a	UDP-glucose pyrophosphorylase 2a	50,35
109	spast	spastin	50,38
110	dpy30	non-coding RNA	50,40
111	dpy30	protein dpy-30 homolog	50,40
112	psen2	presenilin-2	50,41
113	srd5a2a	steroid-5-alpha-reductase alpha polypeptide 2a	50,42
114	jag1a	protein jagged-1a precursor	50,46
115	btbd3a	BTB (POZ) domain containing 3	50,55
116	esf1	ESF1 homolog	50,56
117	ndufaf5	NADH dehydrogenase [ubiquinone] 1 alpha subcomplex assembly factor 5 precursor	50,58
118	actr2a	actin-related protein 2-A	50,76
119	meis4.1a	myeloid ecotropic viral integration site 4.1a	50,84
120	etaa1	Ewing tumor-associated antigen 1	50,89
121	ppp3r1b	protein phosphatase 3 (formerly 2B) regulatory subunit B alpha isoform b	50,91
122	cnrip1a	cannabinoid receptor interacting protein 1a	50,95
123	zgc:165656	uncharacterized protein LOC100126009	50,98
124	prokr1a	prokineticin receptor 2	51,04
125	snrpb2	U2 small nuclear ribonucleoprotein B''	51,07

126	maseh2a	ribonuclease H2 subunit A	51,08
127	prdx2	peroxiredoxin-2	51,09
128	junba	transcription factor jun-B	51,10
129	dand5	DAN domain family member 5 precursor	51,19
130	rad23aa	UV excision repair protein RAD23 homolog A	51,48
131	mf11a	ring finger protein 11a	51,50
132	asna1	ATPase asna1	51,50
133	rab3da	RAB3D member RAS oncogene family a	51,54
134	pld6	mitochondrial cardiolipin hydrolase	51,57
135	cnn1a	uncharacterized protein LOC567396	51,58
136	zgc:194101	uncharacterized protein LOC798684	51,80
137	si:ch211-217k17.10	si:ch211-217k17.10	51,81
138	si:ch211-217k17.7	uncharacterized protein LOC559409	51,82
139	glb1	beta-galactosidase precursor	51,83
140	cldnd1b	claudin domain containing 1b	51,85
141	LOC554386	uncharacterized protein LOC554386	51,85
142	acy3.2	aspartoacylase-2B	51,86
143	acy3.1	aspartoacylase-2A	51,86
144	tacr3l	tachykinin receptor 3-like	51,88
145	abca1a	ATP-binding cassette sub-family A member 1	51,93
146	aptx	aprataxin	52,02
147	osbp	oxysterol-binding protein 1	52,03
148	pat1l	protein PAT1 homolog 1	52,13
149	smarca5	SWI/SNF-related matrix-associated actin-dependent regulator of chromatin subfamily A member 5	52,16
150	il15	interleukin 15	52,60
151	znf330	zinc finger protein 330	52,63
152	mf150	RING finger protein 150 precursor	52,65
153	ucp1	mitochondrial uncoupling protein 3	52,74
154	elmod2	ELMO/CED-12 domain containing 2 precursor	52,76
155	zgc:66455	uncharacterized protein LOC393502 precursor	52,82
156	b3gnt2a	UDP-GlcNAc:betaGal beta-1 3-N-acetylglucosaminyltransferase 2a	52,84
157	commd1	COMM domain-containing protein 1	52,86
158	cct4	T-complex protein 1 subunit delta	53,07
159	pus10	pseudouridylate synthase 10	53,08
160	crfb17	interferon gamma receptor 1 precursor	53,18
161	ltv1	protein LTV1 homolog	53,21
162	capn9	calpain-9	53,22
163	taf5l	TAF5-like RNA pol II p300/CBP-associated factor-associated factor 65 kDa subunit	53,25
164	nup133	nuclear pore complex protein Nup133	53,26
165	acta1a	actin gamma-enteric smooth muscle	53,29
166	dla	delta-like protein A	53,35
167	tekt4	tektin-4	53,94
168	sh:ch211-202h22.9	si:ch211-202h22.9	53,95
169	si:ch211-202h22.8	lipopolysaccharide-induced tumor necrosis factor-alpha factor-like	53,96
170	gprc5bb	G-protein coupled receptor family C group 5 member B-like precursor	54,00
171	exosc1	3'-5' exoribonuclease CSL4 homolog	54,02
172	pgam1b	phosphoglycerate mutase 1b	54,03
173	cdc25d	cell division cycle 25 homolog d	54,04
174	pi4k2a	phosphatidylinositol 4-kinase type 2-alpha	54,06
175	zfyve27	zinc finger FYVE domain containing 27	54,21
176	golga7ba	golgin A7 family member Ba	54,23
177	crtac1a	cartilage acidic protein 1a precursor	54,26
178	khsrp	far upstream element-binding protein 2	54,28
179	zgc:136864	UPF0390 protein zgc136864	54,33
180	vps54	vacuolar protein sorting-associated protein 54	54,33
181	lgalsla	galectin-related protein	54,40
182	aftpha	aftiphilin	54,42
183	mb	myoglobin	54,46
184	pane1	centromere protein M	54,48
185	zgc:158803	uncharacterized protein LOC100038767	54,49
186	mri1	methylthioribose-1-phosphate isomerase	54,51
187	nanos3	nanos homolog 3	54,57
188	si:ch211-286b5.5	guanine nucleotide-binding protein GI/GS/GO gamma-5 subunit	54,59
189	zgc:172106	uncharacterized protein LOC100136844 precursor	54,62

190	dnajb1b	DnaJ (Hsp40) homolog subfamily B member 1	55,07
191	teerb	trans-2 3-enoyl-CoA reductase	55,07
192	ndufb7	NADH dehydrogenase [ubiquinone] 1 beta subcomplex subunit 7	55,10
193	zgc:136908	transitional endoplasmic reticulum ATPase-like	55,11
194	asf1bb	histone chaperone asf1b-B	55,17
195	prkacab	cAMP-dependent protein kinase catalytic subunit gamma	55,20
196	c3a.6	complement C3-H1-like precursor	55,36
197	c3a.1	complement component c3a precursor	55,46
198	crb3b	crumbs homolog 3b	55,51
199	zgc:65894	uncharacterized protein LOC335798	55,55
200	c3a.2	complement component c3a duplicate 2 precursor	55,56
201	c3a.3	complement component c3a duplicate 3 precursor	55,61
202	mir722	microRNA	55,69
203	slc25a10	mitochondrial dicarboxylate carrier	55,75
204	zgc:171452	uncharacterized protein LOC100126110	55,79
205	sc:d0284	uncharacterized protein LOC100135433 precursor	56,28
206	b3gnt1	UDP-GlcNAc:betaGal beta-1 3-N-acetylglucosaminyltransferase-like protein 1	56,63
207	zgc:171470	uncharacterized protein LOC565848 precursor	56,78
208	tspan34	uncharacterized protein LOC751731	56,81
209	si:ch211-114113.9	uncharacterized protein LOC796649	57,26
210	nxn1l	nucleoredoxin-like protein 1	57,27
211	si:ch211-114113.7	procollagen galactosyltransferase 1 precursor	57,28
212	trim35-1	uncharacterized protein LOC553197	57,30
213	caspb	caspase b	57,32
214	caspl	uncharacterized protein LOC566185	57,37
215	zgc:194906	uncharacterized protein LOC100170839	57,71
216	zgc:174890	uncharacterized protein LOC792547	57,80
217	zgc:174928	uncharacterized protein LOC792701	57,81
218	slc27a1b	solute carrier family 27 (fatty acid transporter) member 1	57,87
219	zgc:172091	uncharacterized protein LOC100136869	57,89
220	sid4	secreted immunoglobulin domain 4 precursor	57,97
221	tmed1b	interleukin 1 receptor-like 1 ligand precursor	58,13
222	dnm2l	dynammin-2	58,16
223	zgc:171687	uncharacterized protein LOC100126131 precursor	58,22
224	trip10b	thyroid hormone receptor interactor 10b	58,22
225	pin1	peptidyl-prolyl cis-trans isomerase NIMA-interacting 1	58,29
226	zgc:173915	uncharacterized protein LOC100126122 precursor	58,31
227	mfap4	microfibrillar-associated protein 4 precursor	58,31
228	lpar2b	lysophosphatidic acid receptor 2b	58,42
229	akap8l	A-kinase anchor protein 8-like	58,44
230	zgc:153247	probable glutamate--tRNA ligase mitochondrial precursor	58,45
231	eri2	ERI1 exoribonuclease 2	58,48
232	thumpd1	THUMP domain-containing protein 1	58,48
233	zgc:76872	uncharacterized protein LOC403007	58,51
234	mvb12a	multivesicular body subunit 12A	58,53
235	olfm2b	olfactomedin 2 like	58,54
236	col5a3b	collagen type V alpha 3b precursor	58,55
237	rdh8b	retinol dehydrogenase 8b	58,59
238	parn	poly(A)-specific ribonuclease PARN	58,61
239	cyp3a65	cytochrome P450 family 3 subfamily A polypeptide 65	58,63
240	zgc:77358	transcription factor Sp6	58,83
241	wfikkn1	WAP kazal immunoglobulin kunitz and NTR domain-containing protein precursor	58,86