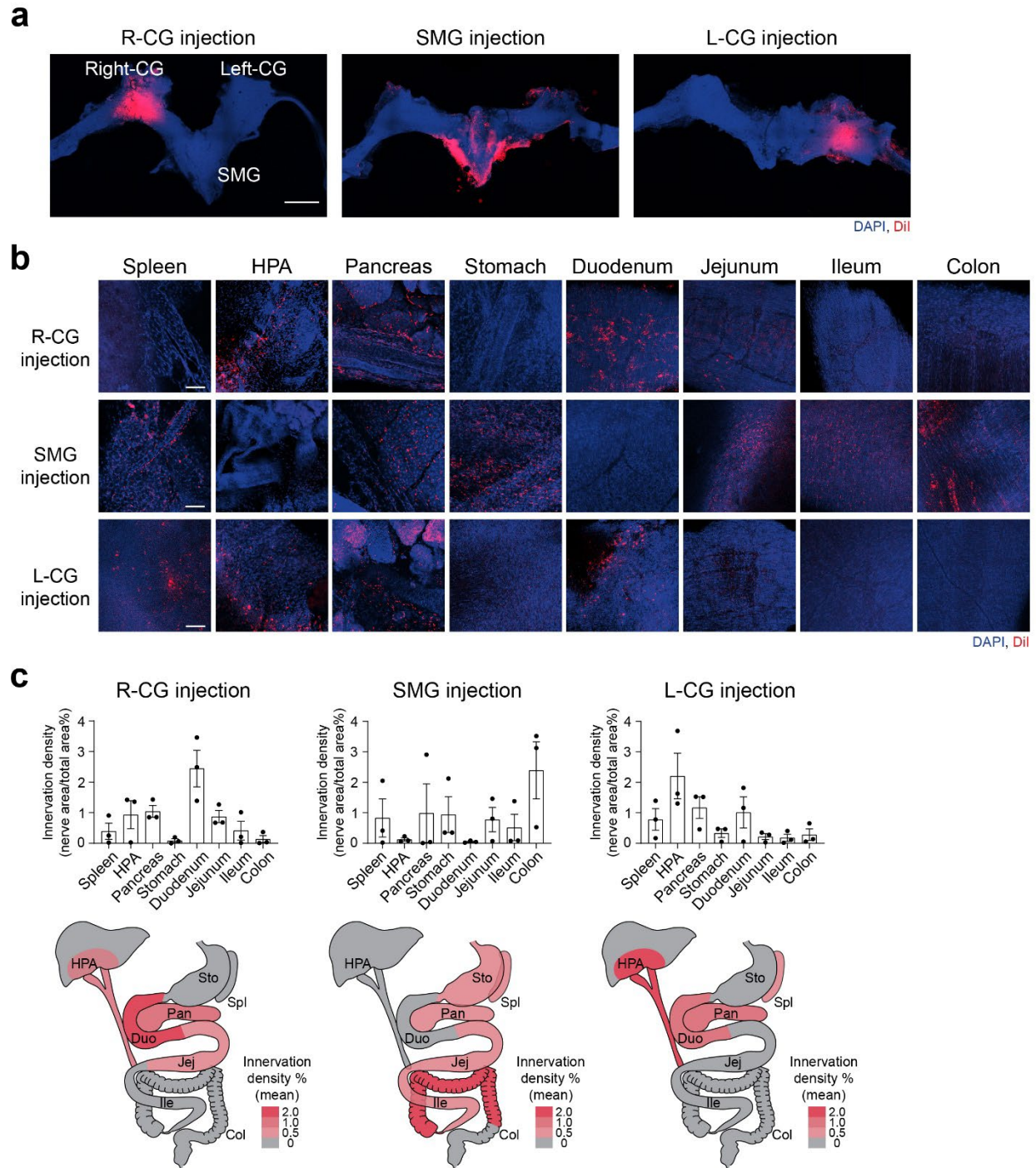

Supplementary information

Organ-specific sympathetic innervation defines visceral functions

In the format provided by the
authors and unedited



Supplementary Fig. 1 Dil anterograde tracing from individual CG-SMG ganglion.

a, Dil injection site (red) in the CG-SMG with DAPI staining background (blue). Scale bar, 500 μ m. **b**, Whole-mount organ innervation patterns of individual CG-SMG ganglion neurons as indicated ($n = 3$ mice). Scale bar, 100 μ m. **c**, Quantification and summary maps of anatomical innervation patterns by individual CG-SMG ganglion neurons with color-coded average nerve density ($n = 3$ mice). Spl, spleen. HPA, hepatic portal area. Pan, pancreas. Duo, duodenum. Sto, stomach. Jej, jejunum. Ile, ileum. Col, colon. Data are presented as mean $\pm$ s.e.m.

	Genes	log2FoldChange	nlog10(p-value)
1	Csmd3	6.5631	86.5330
2	Gm29266	5.7512	81.5032
3	Lrp1b	5.6673	60.2992
4	Kirrel3	5.0051	92.2268
5	Igsf11	4.9721	102.3161
6	Opcml	4.7016	104.8312
7	Hs6st3	4.4249	54.9874
8	Pde11a	4.4086	68.0588
9	Sdk1	4.2237	94.2814
10	Pdzn3	3.9881	52.3136
11	Cdh8	3.8031	77.6938
12	Slc35f4	3.6929	104.2960
13	Vwc2	3.4957	22.2479
14	Adamts19	3.1842	19.0887
15	Nrg1	3.1299	120.4511
16	Shox2	3.1100	21.1656
17	Sncaip	3.0658	24.9763
18	Synpr	2.9838	7.0787
19	Sema5a	2.9478	15.4124
20	Ptprd	2.9249	96.0162
21	Slc24a2	2.8797	46.2098
22	Cdh18	2.7880	21.1085
23	Nol4	2.6962	20.1675
24	Gpc6	2.6724	8.9955
25	Grik1	2.6660	10.5258
26	Bmpr1b	2.6121	13.1075
27	Fbn2	2.5898	13.7311
28	Slc18a1	2.5877	56.2578
29	Kcnd3	2.5300	23.1549
30	Cdh22	2.5294	13.6510
31	Tenm1	2.4676	27.0232
32	Gm20754	2.4457	8.1171
33	Nkain2	2.4156	55.7028
34	Hs3st2	2.3726	22.1338
35	Btbd11	2.3124	30.0528
36	Creg2	2.2714	15.8034
37	Gm48091	2.2697	6.4737
38	Sstr2	2.2460	9.0620
39	Cacng2	2.2281	25.6098
40	Sorl1	2.2257	16.3088
41	Cckar	2.1420	13.6577
42	A330008L17Rik	2.0685	6.0039
43	Susd4	2.0677	21.9452
44	Grid2	2.0218	63.2571
45	Ptprt	1.9861	114.8490
46	Lin7a	1.9827	38.4839
47	Syt10	1.9732	2.8732
48	Tll2	1.9719	7.6621
49	Rtl4	1.9704	1.2309
50	Asic2	1.9477	173.7638
51	Slc35f1	1.9452	23.2232
52	Dsp	1.9250	4.2769
53	Kcnh6	1.9184	17.4901
54	Plppr5	1.9164	33.7489
55	Cacna2d2	1.9164	17.3508

	Genes	log2FoldChange	nlog10(p-value)
56	Pkp4	1.9159	32.7233
57	Luzp2	1.8880	7.6920
58	Slc38a11	1.8611	58.2184
59	Sh3rf3	1.8583	6.2500
60	Kcnd2	1.8494	75.6299
61	Slc2a7	1.8176	1.7447
62	Vwa5b1	1.7746	6.7682
63	1500009L16Rik	1.7584	23.0484
64	Fam135b	1.7570	5.5189
65	Pcdh19	1.7525	4.4917
66	Akain1	1.7103	7.5266
67	Tmem132e	1.7085	7.5067
68	Col6a2	1.6746	5.6470
69	Kcna1	1.6646	2.5747
70	Thy1	1.6561	4.5463
71	Adcy8	1.5859	13.0423
72	Trabd2b	1.5641	1.7077
73	Tox	1.5582	40.9459
74	Cacnb2	1.5444	2.5960
75	Sostdc1	1.5240	2.0431
76	Slc39a11	1.5210	18.4755
77	Art3	1.5173	3.0751
78	Gm45025	1.5169	2.6682
79	Fign	1.5159	1.7550
80	Frmpd4	1.5143	36.9584
81	Prickle1	1.5120	11.6994
82	Hap1	1.5101	15.0449
83	Plekha7	1.5020	3.8080
84	Pparg	1.4812	5.0220
85	Inpp4b	1.4772	2.8018
86	Sntb1	1.4701	3.3472
87	Vsnl1	1.4529	12.0413
88	Ptk2b	1.4475	6.2895
89	Taf9b	1.4288	5.4379
90	Gas6	1.4261	8.7659
91	Trpc6	1.4038	3.0698
92	Mpz	1.3802	2.6994
93	Lrrtm3	1.3713	4.6228
94	Gm41361	1.3664	3.7631
95	Cacna1e	1.3608	8.4108
96	Sorbs2	1.3494	7.3877
97	Zfp36	1.3203	1.6447
98	Tmcc3	1.3098	25.0344
99	Zbtb7c	1.2974	6.8027
100	Cas21	1.2811	19.6001
101	Shisa1	1.2782	7.5679
102	Cdh19	1.2739	1.8605
103	Ndst3	1.2674	6.0753
104	Grid1	1.2581	2.5616
105	Ccdc85a	1.2509	13.5985
106	Parm1	1.2481	15.5255
107	Cntn2	1.2401	3.4124
108	Rims1	1.2357	19.2996
109	Rph3a	1.2292	4.0802
110	Edil3	1.2246	1.2498

	Genes	log2FoldChange	nlog10(p-value)
111	Ghr	1.1970	4.7095
112	Synpo2	1.1804	4.1142
113	Lum	1.1645	1.1702
114	Fgf13	1.1639	2.1731
115	Ptger3	1.1623	9.5221
116	Ifi2712a	1.1587	2.4171
117	AA467197	1.1504	2.0276
118	Sipa1l1	1.1452	5.1101
119	Abca1	1.1449	3.4686
120	Ar	1.1449	3.8384
121	Gria1	1.1433	44.9956
122	Bex1	1.1415	3.0297
123	P3h2	1.1399	2.7472
124	Robo2	1.1287	6.1157
125	Rnf180	1.1287	5.2504
126	Plcl2	1.1196	3.2598
127	Tmem132c	1.1168	25.7764
128	Bcat1	1.1117	2.9205
129	Scn7a	1.1102	4.5110
130	Efr3b	1.1089	11.9285
131	Syt7	1.1087	13.7911
132	Gclc	1.1027	28.5045
133	Lama3	1.0977	8.3317
134	Gm34455	1.0977	1.1929
135	Cers6	1.0966	10.5699
136	Lgi2	1.0948	1.6014
137	Plxna2	1.0943	4.7073
138	Fut8	1.0934	13.5622
139	Grm4	1.0902	3.4312
140	C1qtnf7	1.0866	2.7463
141	Gabrg3	1.0758	0.9535
142	Wscd2	1.0714	9.4276
143	Iqgap2	1.0673	0.9292
144	G0s2	1.0620	1.8631
145	Reln	1.0603	0.8493
146	Sox11	1.0548	4.7976
147	Ptgs1	1.0531	2.1602
148	Foxd3	1.0515	0.8376
149	Cntn4	1.0464	1.1200
150	Gm41333	1.0434	5.8179
151	Gpx3	1.0357	1.6272
152	Zfp536	1.0291	1.0437
153	Fgl2	1.0276	0.6007
154	Dok6	1.0151	10.3791
155	Kcnn2	1.0148	9.2420
156	Gpr176	1.0139	17.3080
157	Nova1	1.0082	2.6388
158	Cplx1	0.9973	5.5379
159	Sez6l	0.9941	10.3388
160	Lhfpl3	0.9921	0.7326
161	St8sia4	0.9907	2.4790
162	Tm4sf1	0.9895	5.1522
163	Slc22a23	0.9843	2.0456
164	Ammeocr1	0.9826	18.3975
165	Tbx3os1	0.9822	3.3301

	Genes	log2FoldChange	nlog10(p-value)
166	Cebpd	0.9743	1.2225
167	Clstn2	0.9738	7.1111
168	Ptprz1	0.9670	0.9134
169	Proc	0.9648	0.3311
170	Rad51b	0.9561	0.6466
171	Dlgap1	0.9523	28.0818
172	St3gal6	0.9493	2.3462
173	Nav2	0.9460	9.8880
174	Ccn1	0.9452	0.4938
175	Adamts5	0.9367	0.8581
176	Syndig1	0.9363	0.8376
177	Adgrb2	0.9332	3.6846
178	Gm17276	0.9239	5.2909
179	Fut1	0.9236	0.3531
180	Mrap2	0.9221	5.9742
181	Rffl	0.9204	2.3813
182	Slc16a2	0.9197	4.3938
183	Cdh2	0.9183	20.4233
184	Vwc2l	0.9160	26.2120
185	Adcy2	0.9155	2.3294
186	Cd83	0.9144	0.2574
187	Ppm1e	0.9122	5.0844
188	Nhs12	0.9005	2.7691
189	Prkcb	0.8933	7.6859
190	Pdgfa	0.8918	3.2683
191	9430021M05Rik	0.8902	1.9468
192	Ccdc148	0.8873	6.1020
193	Il1rapl1	0.8834	1.3256
194	Cpne4	0.8808	1.0958
195	Plp1	0.8789	1.9291
196	Col1a2	0.8784	1.3913
197	Itgb8	0.8756	0.6947
198	Mmd	0.8712	5.9948
199	Nnat	0.8691	3.5255
200	Ngb	0.8642	2.3663
201	Egfl8	0.8591	0.7163
202	Tmem108	0.8544	13.5723
203	Lynx1	0.8533	2.6583
204	Dmkn	0.8532	1.2058
205	Nos1ap	0.8522	4.4335
206	Tbx20	0.8503	8.0794
207	Rgs4	0.8497	3.9351
208	Gm36264	0.8469	2.3613
209	D430041D05Rik	0.8436	8.1272
210	Spock1	0.8432	16.6462
211	Trerf1	0.8328	7.5387
212	Kcnt1	0.8312	11.6014
213	Prkca	0.8221	49.9152
214	Angptl6	0.8216	1.5631
215	Rgs10	0.8205	1.8383
216	4933406118Rik	0.8184	2.7901
217	Adgrg6	0.8162	0.6870
218	Ppp4r4	0.8122	4.3437
219	Atp8a2	0.8119	18.2503
220	Sfrp5	0.8105	1.1295

	Genes	log2FoldChange	nlog10(p-value)
221	Samd5	0.8102	1.7763
222	Ntrk3	0.8057	1.0786
223	Ccbe1	0.8043	0.9148
224	Gem	0.8001	0.8944
225	Prnp	0.7963	2.2713
226	Slc25a20	0.7951	1.7769
227	Rnf112	0.7876	4.6228
228	Ctnna3	0.7875	1.5449
229	Slc8a3	0.7812	10.1260
230	Birc3	0.7755	2.1849
231	Ptchd1	0.7736	3.8325
232	Sncb	0.7730	2.3613
233	Lmo3	0.7714	0.9393
234	Rgs2	0.7708	0.7635
235	Tpm1	0.7691	5.2132
236	Pde10a	0.7671	9.7111
237	Rcan2	0.7662	7.6161
238	Sorbs2os	0.7613	1.0702
239	Slco2a1	0.7603	0.7862
240	Gm12371	0.7584	1.2697
241	Tenm4	0.7539	6.3756
242	Trpc7	0.7512	2.0498
243	Slc35g2	0.7466	1.3994
244	Minar2	0.7407	3.8686
245	Tiam1	0.7355	2.2283
246	Cd52	0.7345	0.5531
247	Pde7b	0.7341	0.5070
248	Miat	0.7337	8.1096
249	Gata3	0.7273	3.8176
250	Cnp	0.7239	1.5833
251	Hdac9	0.7177	9.1791
252	Tbx3	0.7128	2.4128
253	Efcab1	0.7109	1.5365
254	Tmtc1	0.7082	6.6612
255	Adra2a	0.7077	1.0392
256	Airn	0.7054	13.1156
257	6030407O03Rik	0.7044	1.4991
258	Ccdc92	0.6981	3.4503
259	B4galt5	0.6970	2.4000
260	Mitf	0.6962	8.8598
261	Dgkb	0.6938	15.9671
262	5330434G04Rik	0.6876	5.5954
263	Srcin1	0.6875	3.4341
264	Cfap54	0.6873	1.0335
265	Lsamp	0.6868	38.1382
266	Ephb2	0.6862	3.8744
267	Col15a1	0.6854	0.4767
268	Kitl	0.6846	8.9245
269	Pik3r3	0.6789	2.7534
270	Cdr1os	0.6775	7.0571
271	Col6a1	0.6758	0.4001
272	Adcyap1r1	0.6728	5.5591
273	Hcn1	0.6699	0.4137
274	Slc7a5	0.6667	0.8606
275	6430548M08Rik	0.6662	3.1637

	Genes	log2FoldChange	nlog10(p-value)
276	Mcc	0.6652	0.5719
277	Arhgap24	0.6649	0.6172
278	Magi1	0.6644	10.1753
279	Dpp6	0.6622	28.8446
280	Ak1	0.6608	1.6762
281	Pde2a	0.6603	1.9635
282	Gm12682	0.6600	0.2135
283	Slc35f3	0.6563	5.6189
284	Fam174b	0.6544	1.1877
285	Vgf	0.6535	1.0156
286	Gpr45	0.6489	4.6746
287	Nefh	0.6482	1.1766
288	Sorcs1	0.6475	1.0724
289	Rel	0.6467	0.8417
290	Cit	0.6466	3.5339
291	Fabp3	0.6463	1.0702
292	Pde1a	0.6452	0.3360
293	Fabp7	0.6415	1.6847
294	Col28a1	0.6402	0.4759
295	Gatm	0.6367	0.7573
296	Atf3	0.6358	0.3375
297	Nabp1	0.6351	1.0138
298	Bbof1	0.6345	1.1998
299	Gas2l3	0.6316	0.3180
300	Ndr4	0.6313	6.6488
301	Scn2b	0.6312	0.9875
302	Slc44a5	0.6301	0.9783
303	Cntnap5c	0.6292	0.9056
304	Nfe2l2	0.6283	0.9113
305	Abtb2	0.6265	1.0104
306	Mdga1	0.6264	1.1654
307	Postn	0.6251	0.5389
308	Aff3	0.6250	2.4891
309	Camk2n2	0.6218	1.6837
310	Tmem59l	0.6196	0.9105
311	S100b	0.6196	0.8397
312	Tgfb1	0.6165	1.5131
313	Magee1	0.6159	0.9451
314	Cygb	0.6148	1.4793
315	Arnt2	0.6133	1.6536
316	Parvb	0.6104	2.7409
317	Ctxn2	0.6098	0.8276
318	Ctnnal1	0.6075	1.9776
319	Csgalnact1	0.6060	0.5288
320	Igfbp5	0.6018	0.2286
321	Pip5k1b	0.6014	0.5041
322	Mt1	0.6003	0.7536
323	Nfkb1a	0.5973	0.7593
324	Eepd1	0.5946	0.9649
325	Sds1	0.5944	0.8422
326	Amer2	0.5938	3.2807
327	Gng3	0.5929	2.1175
328	Cep126	0.5905	5.6723
329	Pfkfb3	0.5899	0.6629
330	Unc5b	0.5888	1.6861

	Genes	log2FoldChange	nlog10(p-value)
331	Tuba4a	0.5872	1.1582
332	Gk	0.5855	1.7447
333	Evpl	0.5842	1.1429
334	Cryab	0.5805	0.5269
335	Gm15398	0.5801	0.3550
336	B3gnt2	0.5785	7.6064
337	Plek	0.5760	0.9807
338	Anks1b	0.5756	12.2304
339	Slc18a2	0.5731	12.7130
340	Clu	0.5719	1.2707
341	Rab3a	0.5691	1.6283
342	Map1a	0.5680	2.8048
343	Gm45716	0.5661	0.8655
344	Khdrbs2	0.5634	2.8018
345	Pip4k2a	0.5616	1.6609
346	Grip1	0.5589	2.0953
347	Prdm16	0.5571	0.3270
348	Abr	0.5547	7.7589
349	Zc3h12c	0.5506	1.9001
350	Psg16	0.5495	0.9896
351	Gata2	0.5490	3.7315
352	Pnma2	0.5482	0.8340
353	Rhoj	0.5468	0.3311
354	Sv2a	0.5461	2.4912
355	Ifit1	0.5453	0.6135
356	Cyb561	0.5447	4.1185
357	Stk32c	0.5433	1.3227
358	Alcam	0.5418	8.1306
359	Kcna2	0.5409	0.5378
360	St8sia3	0.5382	0.6839
361	Megf10	0.5381	0.2571
362	Gdap1	0.5340	2.8476
363	Mab21l1	0.5337	0.5210
364	Rgs7	0.5317	22.4452
365	Xkr4	0.5314	17.1524
366	Sh3gl2	0.5314	4.4923
367	Kif26b	0.5312	10.3121
368	Nrip2	0.5309	0.6202
369	Lingo2	0.5305	20.7108
370	Plcxd2	0.5301	1.0335
371	Gm26542	0.5278	0.8315
372	Pvt1	0.5277	10.7918
373	Slc7a14	0.5276	8.1831
374	Mt3	0.5264	1.6272
375	Tbc1d2	0.5264	0.5435
376	Shpk	0.5234	0.3499
377	Ankrd45	0.5234	1.6041
378	Arsb	0.5233	1.7917
379	Tbc1d8	0.5214	2.3604
380	Agbl4	0.5197	16.3672
381	Mgat4a	0.5182	1.3816
382	Nrip3	0.5153	2.1235
383	Cnnm2	0.5115	1.2215
384	Tent5d	0.5110	0.6910
385	Ankfn1	0.5110	0.6452

	Genes	log2FoldChange	nlog10(p-value)
386	Tppp	0.5104	0.5701
387	Pak1	0.5092	2.1144
388	Slc8a1	0.5085	8.8192
389	Rab3d	0.5080	1.3000
390	Dse	0.5064	0.8048
391	Stk17b	0.5056	0.6471
392	Cmb1	0.5053	1.3905
393	Ccl11	0.5049	0.1860
394	Unc80	0.5046	5.2248
395	Chgb	0.5020	1.7664
396	Snap25	0.4992	17.1489
397	Lgmn	0.4988	1.9763
398	Ehd3	0.4978	0.9807
399	Cnnm1	0.4978	0.6634
400	Ecel1	0.4977	0.5151
401	Lrrc3b	0.4975	1.5427
402	Gap43	0.4972	5.2034
403	Cmtm5	0.4960	0.3236
404	Kcnq3	0.4955	23.6692
405	Srxn1	0.4947	0.7997
406	Crispld2	0.4939	0.2011
407	Tigar	0.4931	0.7660
408	Eef1a2	0.4897	1.9062
409	H2-DMa	0.4895	0.8171
410	Ttc9	0.4894	1.0702
411	Rasgrf2	0.4887	2.4355
412	Tmtc2	0.4878	1.6847
413	Chn2	0.4876	0.4507
414	Rgs7bp	0.4864	3.0308
415	Trpm2	0.4861	0.7801
416	Tfap2b	0.4854	3.8424
417	Cyfip2	0.4850	3.5098
418	Ero1lb	0.4849	0.5361
419	Pde3a	0.4848	10.3447
420	Srsf12	0.4839	0.4732
421	Faim2	0.4825	1.9502
422	Ccdc30	0.4795	1.3336
423	Osbpl6	0.4794	6.1504
424	Fxyd7	0.4790	1.3953
425	Lnx1	0.4783	1.7701
426	Elmod1	0.4766	1.0999
427	Phyhipl	0.4755	1.4277
428	Stxbp5l	0.4752	7.6621
429	Drd2	0.4736	1.9630
430	Ifi30	0.4719	0.3375
431	Fxyd6	0.4714	2.5120
432	A230006K03Rik	0.4705	3.8058
433	Phactr1	0.4703	6.7837
434	Slc9a3r2	0.4684	0.4767
435	Pim1	0.4673	0.4228
436	Cd44	0.4672	0.8877
437	Resp18	0.4664	1.1429
438	Gnaz	0.4663	1.9062
439	Map7	0.4648	5.1655
440	Gdap11l	0.4643	0.8121

	Genes	log2FoldChange	nlog10(p-value)
441	Dnah7b	0.4636	0.8789
442	Gm19938	0.4610	1.4613
443	Fam163a	0.4591	5.9511
444	Cped1	0.4581	0.3014
445	Nrsn2	0.4577	0.5290
446	Dzank1	0.4562	1.4803
447	Actb	0.4524	1.4476
448	Cdkn1a	0.4515	0.2306
449	Serp2	0.4513	1.3657
450	Hcrr1	0.4505	1.3892
451	Cdh4	0.4505	1.2695
452	Cacna1d	0.4502	3.8176
453	Sncg	0.4493	1.8777
454	Tspyl4	0.4491	1.5032
455	Nova2	0.4481	1.8323
456	Zfp365	0.4480	0.5177
457	Grm7	0.4445	6.0458
458	Bex2	0.4435	1.7857
459	Nbl1	0.4425	1.1484
460	Csf1	0.4410	0.3497
461	Zcchc18	0.4408	4.4308
462	Col3a1	0.4403	0.4507
463	Ptpro	0.4374	0.3308
464	Nptxr	0.4338	0.9235
465	Adgrl1	0.4317	2.4350
466	Cend1	0.4284	0.9194
467	Rab3c	0.4274	7.4994
468	Mapk8ip2	0.4261	1.3894
469	Mtus2	0.4252	1.0999
470	Nrg2	0.4246	5.2740
471	Galnt6	0.4231	0.3334
472	Mtcl1	0.4229	3.2221
473	Klf2	0.4228	0.2269
474	Gm10419	0.4226	0.6747
475	Tmem70	0.4218	0.5304
476	Gm16759	0.4218	0.8970
477	Frmd5	0.4200	8.1096
478	Frrs1l	0.4190	0.8783
479	Cadps	0.4189	13.1349
480	Magi3	0.4178	1.1895
481	Rgs17	0.4161	1.6945
482	Hist1h1c	0.4161	0.4916
483	Ctss	0.4144	0.1250
484	Serpinh1	0.4140	0.2250
485	Caskin1	0.4139	1.3605
486	Dstn	0.4136	2.2716
487	Map7d2	0.4135	1.9291
488	Spns2	0.4121	0.6947
489	Gng4	0.4121	1.8564
490	Meg3	0.4114	9.7642
491	Pomgnt1	0.4112	0.8064
492	Pcbd1	0.4109	1.0179
493	G630064G18Rik	0.4101	1.9001
494	Fbxo41	0.4101	1.4564
495	Dlgap3	0.4095	1.3894

	Genes	log2FoldChange	nlog10(p-value)
496	Ccdc136	0.4093	3.3124
497	Xkr7	0.4088	0.4382
498	Sgsm1	0.4086	2.9119
499	B3gat1	0.4069	0.5839
500	Slc38a1	0.4067	1.1671
501	Chka	0.4048	3.2023
502	Dlc1	0.4045	10.9674
503	Lgr4	0.4038	0.7577
504	Basp1	0.4022	2.4350
505	Hid1	0.4022	1.2017
506	Gpr61	0.3999	0.4563
507	Atp8b5	0.3997	0.4955
508	Rph3al	0.3991	1.8823
509	Myo10	0.3982	0.2269
510	Cebpb	0.3969	0.3604
511	Adamts20	0.3968	0.1543
512	Apba2	0.3946	2.0712
513	Malt1	0.3943	0.3278
514	Nr4a1	0.3937	0.6205
515	Mettl18	0.3937	0.1935
516	Necab1	0.3934	1.5365
517	Smpd3	0.3903	3.0783
518	Arhgef15	0.3878	0.7109
519	Tpd52l1	0.3859	0.7236
520	Ier3	0.3851	0.2638
521	Igsf21	0.3850	0.3411
522	Klhl29	0.3846	2.7391
523	Dtna	0.3841	3.4341
524	Rab3b	0.3836	2.9178
525	Gm28050	0.3836	0.3418
526	Nuak1	0.3826	0.6060
527	Agtr1a	0.3824	1.3695
528	Mapkapk2	0.3816	0.5339
529	Wwp1	0.3801	2.3218
530	Cog1	0.3788	0.6007
531	Prkar1b	0.3755	2.3417
532	Acot7	0.3736	2.6275
533	Nacad	0.3729	0.4916
534	Bmerb1	0.3722	1.5104
535	Vat1l	0.3718	3.7465
536	Otulinl	0.3717	0.2846
537	Nsg1	0.3706	1.3124
538	Arfgef3	0.3703	3.8296
539	Sema3e	0.3686	0.2146
540	Tiparp	0.3680	0.5558
541	Parp11	0.3671	0.5654
542	Zcchc12	0.3671	0.4816
543	Arhgap44	0.3662	2.8161
544	Stox2	0.3661	2.1960
545	Aff2	0.3654	0.8340
546	Slc1a1	0.3653	0.3925
547	Alg2	0.3647	0.5753
548	Aatk	0.3646	1.5131
549	Ier5	0.3644	0.1738
550	Tmem117	0.3592	2.8322

	Genes	log2FoldChange	nlog10(p-value)
551	Cdk5r2	0.3590	0.3950
552	Ehbp1	0.3588	3.7680
553	Stat1	0.3585	0.4759
554	Tyrobp	0.3533	0.1109
555	Lonrf2	0.3531	1.1906
556	Atp2b3	0.3518	1.2279
557	Sugct	0.3517	0.4412
558	Sync	0.3513	0.8983
559	Tmem200a	0.3487	1.3953
560	Dipk1b	0.3485	1.1110
561	Nyap2	0.3474	5.0164
562	Jag2	0.3439	0.6005
563	Pkib	0.3436	0.2999
564	Megf9	0.3434	1.2186
565	Caprin2	0.3429	0.4759
566	Pnmal1	0.3420	0.4756
567	Gabbr2	0.3418	1.3155
568	Mest	0.3408	0.7145
569	Ier2	0.3401	0.2070
570	Nipal3	0.3395	0.9824
571	Nexmif	0.3394	0.3782
572	Celf4	0.3383	5.5176
573	Arhgdig	0.3377	0.8655
574	Fbxl16	0.3370	0.7385
575	Carmil2	0.3360	0.3632
576	Hes1	0.3334	0.2179
577	Gm48099	0.3328	0.6005
578	Nudt10	0.3318	0.3369
579	Coro1a	0.3307	0.3867
580	Slc6a6	0.3306	1.3953
581	Atf5	0.3292	0.4517
582	Fhit	0.3282	1.4867
583	Ftl1	0.3273	0.9059
584	Mal	0.3272	0.1602
585	Tex14	0.3270	0.4231
586	Irak2	0.3263	0.2128
587	Mdga2	0.3239	3.5075
588	Ssh2	0.3218	3.6808
589	4833422C13Rik	0.3213	0.3127
590	Efna5	0.3186	7.7707
591	Stx1b	0.3177	0.3327
592	Pfn2	0.3176	0.8125
593	Th	0.3169	1.8327
594	Tspan13	0.3153	1.1162
595	Gpr22	0.3149	0.5041
596	Fam169a	0.3130	0.5027
597	Zcwpw2	0.3129	0.6982
598	Immp2l	0.3110	1.2839
599	Snca	0.3102	1.7549
600	Bend6	0.3102	0.9846
601	Dner	0.3091	3.5422
602	Gipc2	0.3088	0.3760
603	5330417C22Rik	0.3073	0.8393
604	Kcnc4	0.3069	1.1535
605	Pgbd5	0.3068	1.0418

	Genes	log2FoldChange	nlog10(p-value)
606	Prepl	0.3063	0.7788
607	Prima1	0.3053	0.1543
608	Fem1b	0.3045	0.5360
609	Dtx1	0.3044	0.5089
610	Nfkbiz	0.3041	0.2244
611	Atp1a3	0.3036	0.8944
612	1700037H04Rik	0.3033	0.3739
613	Sycp3	0.3019	0.3611
614	Dmac2l	0.3010	0.3360
615	Col25a1	0.3005	0.1982
616	AW551984	0.3004	0.3490
617	Erc2	0.2996	6.2084
618	Elavl3	0.2994	2.7654
619	Plekhg1	0.2981	0.1270
620	Caly	0.2972	0.4955
621	Clic4	0.2952	0.3531
622	Rps6kl1	0.2950	0.4823
623	Acad10	0.2949	0.2751
624	Ppp1r16b	0.2933	0.3360
625	Scn3a	0.2932	2.7809
626	Asns	0.2925	0.3505
627	Mapre3	0.2923	1.0708
628	Itpkb	0.2920	0.1982
629	Rasgef1a	0.2916	0.3920
630	Disp2	0.2900	0.9763
631	Tspan9	0.2894	0.3950
632	Syt14	0.2892	1.0438
633	Kcnn3	0.2891	0.6294
634	Crip1	0.2877	0.5335
635	Rian	0.2848	4.7579
636	Hecw2	0.2830	1.3297
637	Rcan1	0.2828	0.4353
638	Cdk5r1	0.2826	0.2817
639	Schip1	0.2818	0.8508
640	Irgq	0.2816	0.3024
641	Nhs	0.2803	2.3218
642	S100a4	0.2788	0.1784
643	Palmd	0.2774	2.3176
644	Dock4	0.2746	1.9261
645	Dusp8	0.2742	0.3366
646	Cdh20	0.2736	0.1135
647	Nup210	0.2729	0.3311
648	Cemip2	0.2725	0.3012
649	Slc6a2	0.2722	1.6847
650	Tmem151a	0.2718	0.3352
651	Snx8	0.2715	0.4412
652	Chchd10	0.2697	0.4412
653	Trnp1	0.2680	0.5293
654	Flt1	0.2665	0.0769
655	Myl6	0.2661	0.8685
656	Tspan12	0.2655	0.2250
657	Mrtfb	0.2651	0.8428
658	Isy1	0.2650	0.3351
659	Lgi1	0.2647	0.3145
660	Add2	0.2640	1.6340

	Genes	log2FoldChange	nlog10(p-value)
661	Map9	0.2639	0.4724
662	Jph4	0.2628	0.9586
663	Nav3	0.2626	5.3549
664	Wdr6	0.2625	0.4746
665	Gm10684	0.2619	0.3593
666	Stard13	0.2606	0.2321
667	Atxn1	0.2598	2.3294
668	Rgs9	0.2596	0.9587
669	6030443J06Rik	0.2593	0.5616
670	Creb5	0.2591	0.1888
671	Stmn3	0.2589	1.0485
672	Txndc11	0.2587	0.7057
673	Rnf157	0.2580	1.4571
674	Nrg3	0.2575	4.5368
675	Msrb3	0.2572	0.3039
676	Fam49b	0.2565	1.3947
677	Gm17655	0.2558	0.1275
678	Lrriq1	0.2553	0.3593
679	Gm30648	0.2543	0.3311
680	Rnft2	0.2542	0.3080
681	Itgb4	0.2539	0.1121
682	Map6	0.2538	2.3061
683	Rnf152	0.2535	0.5286
684	Cbarp	0.2533	0.4531
685	Gna14	0.2521	0.2519
686	Cd74	0.2512	0.1866
687	Gm47071	0.2507	0.2790
688	Samhd1	0.2505	0.3723
689	Snhg14	0.2504	3.1637
690	Kazn	0.2493	0.1893
691	B830012L14Rik	0.2478	1.7796
692	Mlit11	0.2476	0.7432
693	Rap1gap2	0.2472	2.3060
694	Brsk2	0.2466	0.4788
695	Ncs1	0.2466	0.5351
696	Armh4	0.2463	0.4455
697	Cgref1	0.2453	0.3188
698	Syt5	0.2430	0.4095
699	Dscam	0.2416	0.4251
700	Krt222	0.2415	0.2621
701	B630019K06Rik	0.2406	0.1432
702	Cacnb1	0.2399	0.3593
703	Rnf208	0.2397	0.1776
704	Gnao1	0.2394	2.8304
705	Fbn1	0.2387	0.0966
706	Tango6	0.2385	0.2631
707	Gm13256	0.2369	0.3505
708	Srgn	0.2363	0.0754
709	Arhgap42	0.2360	0.3074
710	Abca6	0.2352	0.3379
711	Zfp444	0.2325	0.3334
712	Prex2	0.2324	0.1543
713	Ppm1l	0.2319	0.9688
714	Lst1	0.2317	0.1163
715	Pbx3	0.2299	0.1749

	Genes	log2FoldChange	nlog10(p-value)
716	Kctd16	0.2283	0.7828
717	C1qb	0.2274	0.0659
718	Cacng3	0.2261	0.1910
719	Tank	0.2258	0.3696
720	Cacnb4	0.2228	0.6067
721	Sult4a1	0.2227	0.5380
722	Rabgef1	0.2218	0.3349
723	Lhfpl4	0.2216	0.3293
724	Snrpn	0.2215	1.3486
725	Adgra1	0.2208	0.2131
726	Dysf	0.2208	0.9807
727	Arhgap22	0.2207	0.9535
728	Fchs2	0.2200	1.0702
729	Epb41	0.2192	0.8340
730	Scn2a	0.2191	1.7763
731	Atp2b2	0.2191	0.9143
732	Phf24	0.2185	1.4562
733	Rab15	0.2181	0.4590
734	Myt1l	0.2175	2.1235
735	Ahcyl2	0.2170	0.9502
736	Rtn1	0.2168	1.5104
737	Nup210l	0.2153	0.1135
738	Pirt	0.2144	0.5531
739	Nebi	0.2143	0.6537
740	Prph	0.2123	1.1200
741	Mal2	0.2114	0.1444
742	Ddc	0.2113	0.9807
743	Adarb1	0.2113	0.4143
744	9430041J12Rik	0.2112	0.1199
745	Mxd1	0.2109	0.1674
746	Srrm4	0.2100	1.3339
747	Scg5	0.2100	0.7976
748	Scn8a	0.2093	1.4609
749	Cplx2	0.2091	0.5616
750	Kank3	0.2087	0.1580
751	Ackr1	0.2083	0.3278
752	Id1	0.2067	0.1432
753	Ica1	0.2060	1.2697
754	Tmem178b	0.2056	3.4457
755	Ifit3	0.2049	0.0794
756	Rgs8	0.2046	0.1826
757	Nedd9	0.2042	0.4143
758	Nrxn1	0.2037	5.5523
759	Zdbf2	0.2019	0.1733
760	Slc5a3	0.2014	0.3024
761	Ccdc28a	0.2009	0.4228
762	Fmn2	0.2008	0.8877
763	Lhfpl5	0.2007	0.2394
764	Nr4a2	0.1999	0.1037
765	Negr1	0.1991	0.7250
766	Polr3g	0.1985	0.2269
767	Ap3b2	0.1979	0.5604
768	Elavl4	0.1956	1.2406
769	Fcer1g	0.1951	0.0562
770	Dnajb1	0.1950	0.1802

	Genes	log2FoldChange	nlog10(p-value)
771	Ctxn1	0.1939	0.3024
772	Jakmip2	0.1938	0.9688
773	Crem	0.1936	0.2394
774	Nif3l1	0.1935	0.1485
775	2210406O10Rik	0.1882	0.1580
776	Ctnnd2	0.1882	2.7012
777	Rims3	0.1877	0.3743
778	Gch1	0.1865	0.5558
779	Tpk1	0.1863	0.3351
780	Plcx3	0.1856	1.5535
781	Rasl10b	0.1814	0.1424
782	Rab39b	0.1813	0.1543
783	Pmp22	0.1811	0.3570
784	Gm41609	0.1811	0.1037
785	Ntrk1	0.1809	0.6641
786	Kcna6	0.1794	0.2269
787	Kcnmb4os2	0.1791	0.1592
788	Ptp4a3	0.1785	0.2394
789	Gm35188	0.1778	0.2873
790	Osbpl10	0.1743	1.3136
791	Nfasc	0.1733	0.9713
792	Cacna1a	0.1724	1.8856
793	Adgb	0.1718	0.1121
794	Dapk1	0.1713	0.7881
795	Nfxl1	0.1701	0.1784
796	Galnt16	0.1691	0.2986
797	Atp2b4	0.1659	0.8410
798	Slit3	0.1656	1.4291
799	Serinc3	0.1655	0.2618
800	Gm17167	0.1646	0.7005
801	Lncenc1	0.1643	0.2039
802	Pld5	0.1640	0.3091
803	Ppp3cc	0.1626	0.3794
804	Tbx2	0.1617	0.1859
805	Srrm3	0.1614	0.8252
806	Nmnat2	0.1611	0.9906
807	Ophn1	0.1610	0.2817
808	Meis1	0.1603	1.1429
809	Lcorl	0.1598	0.3205
810	Gabbr3	0.1596	0.7493
811	Svop	0.1590	0.3464
812	Adcy1	0.1586	0.2121
813	Rbm11	0.1583	0.1714
814	Gm38825	0.1572	0.0722
815	Jazf1	0.1571	1.0056
816	Cog7	0.1564	0.2167
817	Fnbp1	0.1551	0.6027
818	Parp1	0.1548	0.1446
819	Capn5	0.1542	0.3502
820	Galns	0.1542	0.1543
821	Gm26693	0.1536	0.1423
822	Grin1	0.1535	0.3014
823	Myrip	0.1531	0.2319
824	Gm15818	0.1519	0.0554
825	Snap91	0.1496	1.0770

	Genes	log2FoldChange	nlog10(p-value)
826	Tmem130	0.1494	0.1602
827	Ffar3	0.1494	0.1039
828	Homer1	0.1492	0.2140
829	Ikzf1	0.1491	0.0536
830	Kif26a	0.1472	0.3666
831	Rapgef4	0.1468	0.2175
832	Actn1	0.1457	0.3925
833	Dcun1d4	0.1448	0.2519
834	Dock3	0.1443	1.1662
835	Mpp7	0.1441	0.3774
836	Gusb	0.1439	0.1117
837	MacroD2	0.1436	1.5185
838	Bgn	0.1420	0.0565
839	Nudt11	0.1394	0.1135
840	Dennd4a	0.1390	0.3360
841	Susd2	0.1379	0.1284
842	Ablim2	0.1363	0.8239
843	Gm26871	0.1354	1.5074
844	Tbxas1	0.1352	0.0857
845	Spock2	0.1347	0.4441
846	Rab11fip4	0.1328	0.2731
847	Tmem80	0.1327	0.1552
848	Bin3	0.1326	0.1137
849	Syng3	0.1319	0.2519
850	Xkr6	0.1310	0.8655
851	Abi3bp	0.1304	0.0558
852	Pdxdp	0.1300	0.0912
853	Serpinf1	0.1297	0.0867
854	Tnfrsf21	0.1294	0.2097
855	Gucy1b1	0.1283	0.2704
856	Rbbp8	0.1265	0.1543
857	Rragd	0.1264	0.1440
858	4933400F21Rik	0.1259	0.0904
859	C230038L03Rik	0.1228	0.1275
860	Pde3b	0.1227	0.1470
861	Kif1a	0.1224	0.4746
862	Scg2	0.1224	0.1907
863	Tlx2	0.1223	0.2070
864	Ern1	0.1222	0.2618
865	Lama2	0.1211	0.0744
866	Slc9a7	0.1209	0.3014
867	Smoc2	0.1183	0.0423
868	Cep170b	0.1174	0.1470
869	Gpc3	0.1173	0.0412
870	Gmpr	0.1170	0.1156
871	Acer3	0.1168	0.2466
872	Ptprn	0.1168	0.5199
873	Ccnyl1	0.1165	0.1293
874	Etv6	0.1132	0.2817
875	Snx5	0.1129	0.1108
876	Nap1l5	0.1111	0.2081
877	Furin	0.1102	0.0867
878	Zfp941	0.1101	0.1359
879	Kcnb1	0.1084	0.2295
880	Dennd5b	0.1071	0.2147

	Genes	log2FoldChange	nlog10(p-value)
881	Gabrg2	0.1067	0.1090
882	Gfod2	0.1064	0.1485
883	Selenop	0.1061	0.0649
884	Col6a5	0.1056	0.0565
885	Spire2	0.1056	0.1395
886	Clmp	0.1049	0.1876
887	Syt17	0.1041	0.3425
888	Uvrage	0.1040	0.2140
889	Susd1	0.1039	0.1121
890	Pacsin1	0.1035	0.2631
891	Grk3	0.1034	0.3920
892	Camk2b	0.1024	0.2295
893	Slc25a33	0.1019	0.1580
894	Shtn1	0.1008	0.3502
895	Hpcal4	0.0999	0.1275
896	Gm40323	0.0990	0.0309
897	Fam107b	0.0986	0.0530
898	Cdk17	0.0969	0.1211
899	Chrna3	0.0966	0.2814
900	Slc20a1	0.0964	0.1246
901	Ppp2r5b	0.0963	0.1329
902	Hsph1	0.0963	0.1283
903	Mcpt4	0.0958	0.0529
904	Lrrfip1	0.0958	0.2251
905	Bsn	0.0951	0.1818
906	Bicd1	0.0945	0.4248
907	Ppp2r2c	0.0935	0.2801
908	Enox1	0.0925	0.8745
909	Dync1i1	0.0917	0.3418
910	BC028471	0.0911	0.0763
911	Samd12	0.0910	0.4001
912	Ackr4	0.0907	0.0593
913	Chd5	0.0887	0.2469
914	Coro2a	0.0868	0.1982
915	Syt9	0.0868	0.3360
916	Rhob	0.0858	0.0665
917	Hist3h2ba	0.0854	0.0614
918	Angpt2	0.0849	0.0565
919	Tubb3	0.0845	0.2269
920	St3gal4	0.0840	0.1098
921	Abi1	0.0834	0.2295
922	Ezh2	0.0829	0.0819
923	Psd	0.0826	0.1121
924	Eml6	0.0823	0.4592
925	Tmem179	0.0816	0.1080
926	Egfr	0.0814	0.0235
927	Sez6l2	0.0814	0.0970
928	Ubash3b	0.0800	0.2259
929	Esrrg	0.0786	0.1403
930	Celf6	0.0783	0.1444
931	Napb	0.0782	0.1550
932	Cntn1	0.0773	0.3178
933	Zfp697	0.0771	0.0558
934	C1qa	0.0771	0.0249
935	Ppfia3	0.0770	0.1038

	Genes	log2FoldChange	nlog10(p-value)
936	Ralgs2	0.0764	0.1802
937	Nim1k	0.0746	0.0821
938	Loxl2	0.0742	0.0679
939	Hmgcll1	0.0737	0.2121
940	Ric3	0.0727	0.1046
941	Rnf220	0.0721	0.0900
942	Ckmt1	0.0717	0.0504
943	Sh3yl1	0.0714	0.0676
944	Usp20	0.0698	0.1485
945	Rab27a	0.0693	0.1090
946	Jakmip1	0.0690	0.2150
947	Cadm3	0.0687	0.1146
948	Stmn4	0.0682	0.0787
949	Gm45510	0.0682	0.0376
950	Ptprg	0.0675	0.1440
951	Gm44148	0.0672	0.0568
952	Fhl1	0.0661	0.0787
953	Gng11	0.0656	0.0263
954	Shank3	0.0648	0.0814
955	Rbfox1	0.0642	0.5877
956	Syn1	0.0634	0.1663
957	Hspa1a	0.0623	0.0423
958	Atp1b1	0.0609	0.1135
959	Hdac11	0.0605	0.0574
960	Lrp11	0.0604	0.1121
961	Dusp26	0.0599	0.0639
962	Entpd5	0.0594	0.0498
963	Ddx25	0.0590	0.0379
964	Hecw1	0.0584	0.2039
965	A430010J10Rik	0.0567	0.0593
966	Tesc	0.0562	0.1046
967	Reep2	0.0560	0.0781
968	Reep1	0.0544	0.2189
969	Slc12a2	0.0525	0.0592
970	Isg15	0.0524	0.0208
971	Plekha4	0.0518	0.0294
972	4930444A19Rik	0.0517	0.0273
973	Fbxo2	0.0514	0.0432
974	Maf	0.0498	0.0203
975	Hs3st5	0.0498	0.1442
976	Tmem151b	0.0477	0.0367
977	Arhgap29	0.0477	0.0268
978	D430019H16Rik	0.0467	0.0536
979	Ptprn2	0.0462	0.2544
980	Tm6sf1	0.0454	0.0432
981	Jph3	0.0449	0.0502
982	Glul	0.0390	0.0379
983	Ifrd1	0.0389	0.0454
984	Xylt1	0.0386	0.0268
985	Mgat4c	0.0385	0.0509
986	Fry	0.0376	0.1270
987	Sarm1	0.0373	0.0268
988	Dock9	0.0363	0.0439
989	Tlll7	0.0348	0.0900
990	Prr15	0.0319	0.0216

	Genes	log2FoldChange	nlog10(p-value)
991	4933424G05Rik	0.0317	0.0208
992	Cyp4x1	0.0316	0.0294
993	Id2	0.0314	0.0209
994	Dkk3	0.0311	0.0432
995	Ap1p1	0.0305	0.0347
996	Ankrd44	0.0303	0.0357
997	Ap4e1	0.0300	0.0351
998	Gm7854	0.0299	0.0206
999	Cdkl2	0.0296	0.0454
1000	Sulf1	0.0283	0.0134
1001	Arhgef4	0.0277	0.0250
1002	Mir670hg	0.0273	0.0279
1003	Spink10	0.0271	0.0399
1004	Adgrb3	0.0258	0.1091
1005	Ufsp1	0.0257	0.0217
1006	Ldb2	0.0252	0.0112
1007	Gm47271	0.0252	0.0249
1008	Gcnt2	0.0245	0.0347
1009	Kcnma1	0.0240	0.1146
1010	Gm20721	0.0233	0.0272
1011	Prdm10	0.0233	0.0304
1012	Jdp2	0.0224	0.0238
1013	Nefl	0.0221	0.0330
1014	Filip1l	0.0218	0.0244
1015	Eif2b3	0.0216	0.0268
1016	Nrxn2	0.0213	0.0294
1017	Hcn3	0.0211	0.0208
1018	Ece2	0.0207	0.0404
1019	Far1os	0.0194	0.0208
1020	Pcbp3	0.0192	0.0960
1021	Shf	0.0183	0.0249
1022	Junb	0.0168	0.0170
1023	Kif5c	0.0160	0.0402
1024	Tpd52	0.0156	0.0268
1025	Herc3	0.0152	0.0268
1026	Kctd12	0.0150	0.0140
1027	Kif5a	0.0141	0.0357
1028	Panx2	0.0126	0.0115
1029	Actl6b	0.0120	0.0152
1030	4930599N23Rik	0.0117	0.0132
1031	Ank3	0.0110	0.0495
1032	Mtmr7	0.0092	0.0177
1033	Gfod1	0.0082	0.0170
1034	Dmtn	0.0081	0.0141
1035	Srgap3	0.0081	0.0294
1036	Cyp2j12	0.0079	0.0083
1037	Cenpp	0.0068	0.0074
1038	Cltc	0.0057	0.0140
1039	Frmd3	0.0055	0.0112
1040	Wdr17	0.0006	0.0011
1041	Akap6	-0.0022	0.0115
1042	Pde8b	-0.0025	0.0026
1043	Cib2	-0.0030	0.0034
1044	E230029C05Rik	-0.0048	0.0058
1045	Gm28376	-0.0055	0.0070

	Genes	log2FoldChange	nlog10(p-value)
1046	Pde7a	-0.0059	0.0115
1047	A930037H05Rik	-0.0077	0.0071
1048	Cacna1c	-0.0080	0.0116
1049	6330403K07Rik	-0.0088	0.0134
1050	Cblb	-0.0092	0.0209
1051	Slc4a8	-0.0094	0.0178
1052	Eya1	-0.0111	0.0294
1053	Cttnbp2	-0.0129	0.0249
1054	Stmn2	-0.0138	0.0324
1055	Bag3	-0.0145	0.0240
1056	Arih1	-0.0159	0.0404
1057	Sgip1	-0.0200	0.0903
1058	Trmt61b	-0.0201	0.0140
1059	Gm38604	-0.0207	0.0184
1060	9230102O04Rik	-0.0210	0.0208
1061	Tulp3	-0.0211	0.0283
1062	Ngfr	-0.0233	0.0354
1063	Mab21l2	-0.0246	0.0272
1064	Fam89a	-0.0261	0.0326
1065	Satb1	-0.0281	0.0347
1066	Mctp1	-0.0282	0.0630
1067	Atcay	-0.0294	0.0432
1068	Panx1	-0.0298	0.0271
1069	Hand2os1	-0.0299	0.1903
1070	5730522E02Rik	-0.0302	0.0268
1071	Bend7	-0.0311	0.0432
1072	Sgpp2	-0.0323	0.1038
1073	Rsph14	-0.0335	0.0249
1074	Rundc3a	-0.0364	0.0618
1075	Jun	-0.0381	0.0337
1076	Gm20536	-0.0386	0.0268
1077	Adam2	-0.0389	0.0132
1078	Slc7a8	-0.0402	0.0494
1079	Chga	-0.0403	0.0347
1080	Sgms2	-0.0420	0.0527
1081	Mm2pr	-0.0436	0.0423
1082	Mmp16	-0.0438	0.1279
1083	2210408l21Rik	-0.0439	0.0960
1084	Egfem1	-0.0457	0.0822
1085	Rab43	-0.0458	0.0438
1086	Stk32a	-0.0463	0.1205
1087	Rnf165	-0.0468	0.1121
1088	Snhg11	-0.0470	0.1792
1089	Gm28379	-0.0477	0.0434
1090	Plekha6	-0.0504	0.2121
1091	Hspa1b	-0.0505	0.0353
1092	Rbpms	-0.0505	0.0208
1093	1700126G02Rik	-0.0507	0.0381
1094	Mark1	-0.0525	0.0935
1095	Faxc	-0.0529	0.1038
1096	Srgap1	-0.0531	0.1444
1097	Taf4b	-0.0535	0.0376
1098	Gm26916	-0.0535	0.0208
1099	Rcan3	-0.0538	0.0978
1100	Picalm	-0.0542	0.1131

	Genes	log2FoldChange	nlog10(p-value)
1101	Tmeff1	-0.0556	0.0960
1102	Kcnq1ot1	-0.0557	0.2721
1103	Insrr	-0.0557	0.1123
1104	Tgfb2	-0.0574	0.0294
1105	Grik2	-0.0574	0.1440
1106	Emb	-0.0587	0.1038
1107	Gm16189	-0.0627	0.0565
1108	Gucy1a2	-0.0628	0.1480
1109	Tubb2b	-0.0635	0.0957
1110	Unc79	-0.0643	0.2728
1111	4-Mar	-0.0645	0.1802
1112	Otud7a	-0.0665	0.3894
1113	Nefm	-0.0671	0.1117
1114	Slc43a2	-0.0676	0.1090
1115	Rundc3b	-0.0679	0.1348
1116	Ica1l	-0.0684	0.0857
1117	Bicc1	-0.0697	0.0381
1118	Gm19409	-0.0697	0.0347
1119	Gm26672	-0.0710	0.0494
1120	Sptb	-0.0723	0.0324
1121	Thrb	-0.0728	0.1109
1122	Omp	-0.0735	0.0364
1123	9530059O14Rik	-0.0749	0.4233
1124	Slc45a1	-0.0767	0.1038
1125	Rimbp2	-0.0770	0.4415
1126	Fam117b	-0.0783	0.1838
1127	Sptbn2	-0.0808	0.1121
1128	Glrh	-0.0812	0.1204
1129	Myo5a	-0.0844	0.2571
1130	Unc93b1	-0.0847	0.0395
1131	Snph	-0.0870	0.2472
1132	Gm29773	-0.0871	0.0318
1133	Tom1	-0.0873	0.1111
1134	Fsd1	-0.0894	0.1039
1135	Fgf12	-0.0922	0.4219
1136	C230037L18Rik	-0.0923	0.0900
1137	Ryr2	-0.0924	0.6039
1138	Terb1	-0.0941	0.0347
1139	Hand2	-0.0942	0.2269
1140	Gm34030	-0.0951	0.0754
1141	Gm26691	-0.0951	0.1238
1142	Egfl7	-0.0957	0.0772
1143	Dclre1c	-0.0964	0.1146
1144	Gria2	-0.0980	0.5676
1145	Coq10b	-0.0984	0.1270
1146	4930484I04Rik	-0.0987	0.1109
1147	Nf2	-0.0999	0.1485
1148	Cep95	-0.1007	0.1084
1149	Mast4	-0.1018	0.0787
1150	Hoxc9	-0.1025	0.0565
1151	Gm50013	-0.1034	0.1109
1152	Plk2	-0.1037	0.1135
1153	Sipa1l3	-0.1049	0.1155
1154	Gpam	-0.1050	0.1155
1155	Adgrv1	-0.1058	0.0509

	Genes	log2FoldChange	nlog10(p-value)
1156	Pafah1b3	-0.1062	0.0794
1157	Bms1	-0.1064	0.1424
1158	Mgp	-0.1076	0.0401
1159	Psd3	-0.1077	0.2121
1160	Bcam	-0.1083	0.1490
1161	Sobp	-0.1099	0.3739
1162	Phactr3	-0.1099	0.4228
1163	Golga7b	-0.1112	0.1199
1164	Gm5089	-0.1113	0.0699
1165	Gpr85	-0.1122	0.0942
1166	Gfra3	-0.1130	0.0565
1167	Ccser1	-0.1147	1.0315
1168	Errfi1	-0.1156	0.0900
1169	Gm15283	-0.1156	0.0645
1170	Cav1	-0.1158	0.0423
1171	Ddr2	-0.1161	0.0376
1172	Gm42372	-0.1176	0.1275
1173	Nsg2	-0.1189	0.3121
1174	Mtss1	-0.1197	0.3428
1175	Nlgn1	-0.1209	0.2571
1176	Gm11290	-0.1216	0.0381
1177	Vamp1	-0.1219	0.1270
1178	Ankrd29	-0.1222	0.1663
1179	Stac	-0.1232	0.4959
1180	Klf8	-0.1234	0.2443
1181	Thsd4	-0.1241	0.2011
1182	4930512B01Rik	-0.1245	0.1037
1183	C77080	-0.1269	0.1284
1184	Palld	-0.1282	0.1216
1185	Mbd1	-0.1284	0.1315
1186	Agps	-0.1291	0.3069
1187	Unc5a	-0.1301	0.2017
1188	Gm15563	-0.1311	0.1475
1189	Kcnip4	-0.1328	0.3101
1190	Ranbp17	-0.1341	0.3928
1191	Hexb	-0.1348	0.1717
1192	Gm15886	-0.1359	0.0924
1193	Lym9	-0.1361	0.1329
1194	Gab1	-0.1373	0.1117
1195	Ttc9b	-0.1400	0.1488
1196	Lrrc19	-0.1405	0.1037
1197	Sema4f	-0.1413	0.1435
1198	Gm1992	-0.1418	0.1846
1199	Gm16083	-0.1420	0.4679
1200	Gria4	-0.1440	1.0724
1201	Osbpl3	-0.1448	0.6338
1202	Dhx37	-0.1448	0.0906
1203	Nxn	-0.1462	0.4750
1204	Tmem63c	-0.1474	0.3186
1205	Plppr4	-0.1490	0.3091
1206	Rims2	-0.1497	1.3514
1207	Enox2	-0.1506	0.3211
1208	Tgfb1	-0.1507	0.1283
1209	Amph	-0.1511	0.5311
1210	Ydjc	-0.1520	0.1763

	Genes	log2FoldChange	nlog10(p-value)
1211	Unc13a	-0.1520	0.4978
1212	Eogt	-0.1523	0.1425
1213	Egr1	-0.1535	0.1135
1214	Dmxl2	-0.1537	0.7573
1215	A230057D06Rik	-0.1548	0.9429
1216	Medag	-0.1553	0.1283
1217	Rnasel	-0.1558	0.1792
1218	Ppp1r12b	-0.1561	0.6430
1219	Tfrc	-0.1565	0.2179
1220	Oprm1	-0.1612	0.1312
1221	Abcb1a	-0.1635	0.3963
1222	Ache	-0.1637	0.2796
1223	Asphd2	-0.1664	0.1329
1224	Nrg3os	-0.1670	0.2912
1225	Klf10	-0.1672	0.1664
1226	Sgtb	-0.1672	0.3522
1227	Gm49961	-0.1679	0.1440
1228	St8sia1	-0.1682	0.5125
1229	Rarb	-0.1684	0.0970
1230	Fos	-0.1689	0.1475
1231	Slc36a1	-0.1697	0.4129
1232	Pitpnc1	-0.1707	0.4724
1233	Clgn	-0.1714	0.3343
1234	Zmat4	-0.1718	0.7935
1235	Rgs6	-0.1729	0.1037
1236	Ttbk1	-0.1731	0.3611
1237	Zhx3	-0.1739	0.3145
1238	Dmd	-0.1783	0.4174
1239	Ttl	-0.1794	0.3920
1240	C1qc	-0.1811	0.0423
1241	Zfpm2	-0.1833	1.4804
1242	Plekhn2	-0.1837	0.3375
1243	Mthfd1l	-0.1846	0.3247
1244	Tnfrsf23	-0.1850	0.0837
1245	Jhy	-0.1861	0.3154
1246	Sv2c	-0.1861	1.4147
1247	Ehd4	-0.1870	0.2174
1248	5330438D12Rik	-0.1878	0.3894
1249	Rab4a	-0.1882	0.2244
1250	Chst1	-0.1886	0.2288
1251	Eif5a2	-0.1905	0.1964
1252	Gm12002	-0.1917	0.2097
1253	Nt5c1a	-0.1926	0.3670
1254	Lmbrd2	-0.1927	0.3995
1255	3-Sep	-0.1930	0.3198
1256	Gm17529	-0.1935	0.1440
1257	Kcnab2	-0.1944	0.2544
1258	H1fx	-0.1967	0.1435
1259	Mmp2	-0.1968	0.2072
1260	Elmsan1	-0.1978	0.2003
1261	Pcsk1n	-0.1979	0.4759
1262	Iqsec3	-0.1991	0.4058
1263	Syne3	-0.1999	0.1440
1264	Atrnl1	-0.2014	2.6261
1265	Mapk6	-0.2015	0.2269

	Genes	log2FoldChange	nlog10(p-value)
1266	Nrn1	-0.2018	0.1135
1267	Cdhr1	-0.2021	0.1432
1268	Tshz2	-0.2029	0.4075
1269	Ksr2	-0.2035	0.4972
1270	Galnt18	-0.2052	0.1739
1271	Gm36975	-0.2056	0.3570
1272	Gm39214	-0.2063	0.2315
1273	Rasgef1b	-0.2084	0.7235
1274	Ppp1r15a	-0.2086	0.1424
1275	Flrt3	-0.2114	0.2661
1276	Scube1	-0.2148	0.4759
1277	Nlrc5	-0.2152	0.1580
1278	Insm2	-0.2157	0.1543
1279	Rtl1	-0.2162	0.2099
1280	Adgrl2	-0.2170	0.2243
1281	Mpp6	-0.2171	0.5458
1282	Ptpnb	-0.2174	0.2394
1283	Kcnh1	-0.2182	1.1064
1284	Arhgap10	-0.2200	0.2576
1285	Nyap1	-0.2204	0.3531
1286	Lrrc3	-0.2218	0.1986
1287	Serping1	-0.2219	0.1610
1288	Phox2a	-0.2237	0.4420
1289	Fxyd5	-0.2257	0.3464
1290	Slc29a4	-0.2263	0.3351
1291	Crmp1	-0.2263	1.1906
1292	Dpysl5	-0.2263	1.1766
1293	Abca2	-0.2263	0.4143
1294	Pacrg	-0.2274	0.4153
1295	Mef2c	-0.2279	0.0941
1296	Ina	-0.2280	0.4590
1297	Crtac1	-0.2315	0.2635
1298	Lysmd4	-0.2324	0.4767
1299	Trim25	-0.2327	0.3374
1300	Prune2	-0.2355	2.0853
1301	Hunk	-0.2356	0.8490
1302	Pak3	-0.2363	1.1143
1303	Csmd2	-0.2385	0.8767
1304	Scarb1	-0.2399	0.4669
1305	Gm20642	-0.2402	0.5399
1306	Uty	-0.2408	0.2121
1307	Arl4c	-0.2417	0.2498
1308	Tspan5	-0.2423	0.5968
1309	Tmeff2	-0.2426	1.4685
1310	3110021N24Rik	-0.2430	0.5165
1311	Kcnq5	-0.2432	3.9644
1312	Dgkg	-0.2433	0.9658
1313	Syt4	-0.2468	0.8527
1314	Insr	-0.2469	1.0891
1315	Olfr2	-0.2483	0.9597
1316	Nfatc2	-0.2516	0.4747
1317	Sema4d	-0.2520	0.8340
1318	Usp6nl	-0.2524	0.3101
1319	Prox1	-0.2524	0.3513
1320	Scn1a	-0.2533	0.9746

	Genes	log2FoldChange	nlog10(p-value)
1321	B230209E15Rik	-0.2552	0.4590
1322	Cacna1b	-0.2562	3.9045
1323	Bst2	-0.2574	0.1888
1324	Pclo	-0.2582	3.8476
1325	Gm43713	-0.2592	0.4590
1326	Mcf2l	-0.2601	1.1190
1327	Ank2	-0.2611	10.3465
1328	Ptpm	-0.2622	0.3126
1329	Gnb3	-0.2625	0.4810
1330	F2	-0.2628	0.2913
1331	Rasa2	-0.2636	1.5694
1332	Gm26532	-0.2645	0.3589
1333	Arhgap15	-0.2649	0.1415
1334	Cacnb3	-0.2660	0.4594
1335	Swt1	-0.2675	0.6100
1336	Smad9	-0.2683	0.4231
1337	Cxcr4	-0.2706	0.3311
1338	Pcdha-all	-0.2710	1.7230
1339	Nrsn1	-0.2750	0.5156
1340	Col1a1	-0.2752	0.2129
1341	4930588A03Rik	-0.2789	2.0559
1342	D130043K22Rik	-0.2793	1.6606
1343	Csrnp3	-0.2798	1.3160
1344	Flrt1	-0.2817	0.4296
1345	Sema6a	-0.2818	0.2039
1346	Gnal	-0.2823	0.8048
1347	Ppfia2	-0.2824	3.6108
1348	Prkd2	-0.2831	0.2963
1349	Layn	-0.2838	0.5151
1350	Chrm1	-0.2847	0.3154
1351	Kcnq1	-0.2863	0.7604
1352	Gm15614	-0.2867	0.3760
1353	Bean1	-0.2874	0.7696
1354	Gm13889	-0.2885	0.3897
1355	Gm28375	-0.2903	0.4153
1356	Gm10785	-0.2906	0.4961
1357	Ctsc	-0.2920	0.1109
1358	Kcnt2	-0.2923	0.2625
1359	Cep128	-0.2929	0.4352
1360	Ciapi1	-0.2938	0.5210
1361	Gbp7	-0.2948	0.2269
1362	Scn9a	-0.2952	2.5150
1363	Fzd3	-0.2958	0.6641
1364	Lin28b	-0.2971	0.6735
1365	Cda	-0.3020	0.6996
1366	Gm48765	-0.3040	0.4244
1367	Mcub	-0.3048	0.8745
1368	Ppp2r2b	-0.3062	6.1972
1369	Kcnk2	-0.3063	0.1888
1370	Chrn4	-0.3066	0.9229
1371	Fgfr2	-0.3067	0.6531
1372	Galnt13	-0.3084	2.3188
1373	Igfbp7	-0.3095	0.3702
1374	Eda	-0.3101	0.2032
1375	Cux2	-0.3103	1.0183

	Genes	log2FoldChange	nlog10(p-value)
1376	Mical2	-0.3109	0.2384
1377	11-Mar	-0.3113	2.3663
1378	Rnf125	-0.3144	0.4153
1379	Slc15a2	-0.3150	0.3379
1380	Hdx	-0.3152	0.5752
1381	Limk2	-0.3152	1.2284
1382	Pgm2l1	-0.3159	1.1770
1383	Wipf3	-0.3169	0.1962
1384	Spryd7	-0.3176	0.4143
1385	Nxpe4	-0.3180	1.1825
1386	Kcnb2	-0.3181	2.6633
1387	Ptch1	-0.3197	0.4759
1388	B3galt2	-0.3217	0.4035
1389	Ptger4	-0.3224	0.3760
1390	Sybu	-0.3235	2.4673
1391	Gdpd1	-0.3242	0.6337
1392	Col23a1	-0.3244	0.1435
1393	Trim9	-0.3256	0.9344
1394	Pcsk1	-0.3264	0.9502
1395	Myt1	-0.3266	0.9174
1396	Bbs9	-0.3292	1.2908
1397	Isl1	-0.3301	2.1282
1398	Slc4a10	-0.3303	1.5191
1399	Arhgap6	-0.3309	0.3307
1400	Clybl	-0.3348	0.5933
1401	Azin2	-0.3362	2.4394
1402	6530409C15Rik	-0.3369	0.5709
1403	Esys3	-0.3394	0.7324
1404	Atp13a2	-0.3399	1.3991
1405	C78859	-0.3407	3.4185
1406	Zc3hav1	-0.3427	0.6179
1407	Vstm2l	-0.3429	1.3953
1408	Pls3	-0.3450	1.2877
1409	Slc9a9	-0.3454	1.6271
1410	Tsix	-0.3459	0.4001
1411	Nxpe2	-0.3479	0.2394
1412	Fam155a	-0.3480	9.6361
1413	Cxrc4	-0.3491	1.6682
1414	Brinp1	-0.3500	0.6973
1415	Slc16a10	-0.3511	1.3136
1416	Rit2	-0.3513	5.0911
1417	Oasl2	-0.3532	0.4353
1418	Gm15559	-0.3536	0.2943
1419	0610043K17Rik	-0.3542	0.7155
1420	Tmem196	-0.3565	0.3225
1421	Naaladl2	-0.3566	1.6272
1422	Gm12718	-0.3573	0.1594
1423	Gm43376	-0.3592	0.4590
1424	Abcc4	-0.3599	1.4077
1425	Man1a	-0.3599	1.6263
1426	Gpr158	-0.3614	5.6986
1427	Trf	-0.3620	0.1805
1428	Colq	-0.3633	0.2974
1429	Tagln3	-0.3634	0.7778
1430	Hoxc8	-0.3639	0.3634

	Genes	log2FoldChange	nlog10(p-value)
1431	Cacna2d3	-0.3655	2.5535
1432	Pou2f2	-0.3659	0.9896
1433	Doc2b	-0.3666	1.3871
1434	Gm48678	-0.3691	0.8763
1435	Bmp3	-0.3726	0.3531
1436	Riiad1	-0.3746	0.3583
1437	Lyn	-0.3758	0.5006
1438	Gm16599	-0.3759	0.5466
1439	Gramd1b	-0.3765	2.3031
1440	Gm16054	-0.3770	0.3920
1441	Ifi203	-0.3774	0.7635
1442	Sema6d	-0.3792	13.2831
1443	B3galt1	-0.3793	8.8927
1444	Zdhhc14	-0.3793	3.8242
1445	Osbpl8	-0.3812	2.9205
1446	9330182L06Rik	-0.3828	2.7054
1447	Ssc4d	-0.3857	0.0912
1448	Kcnq2	-0.3877	1.8469
1449	Popdc3	-0.3885	0.5203
1450	Pcdh7	-0.3894	3.5484
1451	Btg2	-0.3923	0.4750
1452	Ypel2	-0.3968	1.1274
1453	Dpysl3	-0.4021	5.9995
1454	Igsf9b	-0.4035	3.7128
1455	Cd109	-0.4037	0.1784
1456	Pde4d	-0.4050	8.9572
1457	Flna	-0.4108	1.3953
1458	Gpat2	-0.4117	0.2544
1459	Vav3	-0.4156	0.3014
1460	Chrm2	-0.4168	4.2817
1461	Rims4	-0.4171	0.8576
1462	Rnf213	-0.4175	0.7165
1463	Ptprr	-0.4205	5.1500
1464	Slc10a4	-0.4209	1.1294
1465	Maml3	-0.4222	6.0066
1466	Gm48623	-0.4231	0.4777
1467	Celf3	-0.4242	3.9274
1468	Gm29237	-0.4244	0.9502
1469	Kcnab1	-0.4266	0.7935
1470	Shb	-0.4270	0.9807
1471	Gm6994	-0.4340	1.0485
1472	Gm20275	-0.4346	1.4310
1473	Gm26827	-0.4347	0.6123
1474	Lyz2	-0.4373	0.2400
1475	Gal	-0.4374	0.5890
1476	Spats2	-0.4381	1.0279
1477	Avil	-0.4410	2.3190
1478	Rbpj	-0.4452	1.2204
1479	Ebf2	-0.4461	0.1415
1480	Sp100	-0.4462	0.3180
1481	Gm19710	-0.4465	1.1861
1482	1700042O10Rik	-0.4480	1.5073
1483	Nt5dc2	-0.4494	0.9658
1484	Slain1	-0.4516	0.8342
1485	Gm15675	-0.4526	0.4412

	Genes	log2FoldChange	nlog10(p-value)
1486	Ctnna2	-0.4545	27.4410
1487	Zswim5	-0.4593	0.9307
1488	Camk4	-0.4597	2.3190
1489	Ntng1	-0.4652	0.6543
1490	Fam13a	-0.4675	1.3913
1491	Gm4221	-0.4676	0.6762
1492	Rnf19b	-0.4748	1.0891
1493	Gm12709	-0.4757	1.5104
1494	Dusp15	-0.4758	0.7650
1495	Gm4258	-0.4769	1.0935
1496	Ablim3	-0.4782	2.4541
1497	Cdk11b	-0.4787	1.7960
1498	Nfkb1	-0.4850	2.3812
1499	Dock6	-0.4858	0.5478
1500	Pzp	-0.4859	0.2979
1501	Herc6	-0.4944	1.2591
1502	Mapk10	-0.4945	18.2503
1503	Gucy1a1	-0.4973	3.4799
1504	C920021L13Rik	-0.5039	0.7236
1505	Hook1	-0.5077	3.3591
1506	Gm15336	-0.5078	1.2577
1507	Cnksr2	-0.5089	9.7621
1508	Gm42439	-0.5100	0.8228
1509	Gm46367	-0.5125	1.3871
1510	Sapcd1	-0.5137	0.7700
1511	Ly6e	-0.5143	0.4563
1512	Itga3	-0.5164	1.5894
1513	Gm47167	-0.5174	1.1429
1514	Cdh11	-0.5196	0.3709
1515	Tbc1d9	-0.5266	3.0935
1516	Trim36	-0.5271	2.3657
1517	Rgcc	-0.5282	0.4415
1518	Frmd4b	-0.5282	7.1093
1519	Bnc2	-0.5292	0.1135
1520	Dgki	-0.5308	10.5890
1521	Dclk1	-0.5315	9.3527
1522	Ppm1h	-0.5327	4.4203
1523	Eml5	-0.5336	11.1301
1524	Gadd45g	-0.5336	0.4736
1525	Elk3	-0.5337	1.2275
1526	Syn2	-0.5370	12.4827
1527	Man2c1os	-0.5370	1.4136
1528	Npy	-0.5390	3.1211
1529	Camk2a	-0.5418	2.3039
1530	Gm48383	-0.5419	1.2136
1531	Dlg2	-0.5467	21.3147
1532	Fkbp1b	-0.5514	1.1815
1533	Garnl3	-0.5517	23.0406
1534	Nek1	-0.5540	14.1145
1535	Runx2	-0.5546	0.8798
1536	Ikzf2	-0.5573	1.6041
1537	Nalcn	-0.5575	9.5814
1538	Itgbl1	-0.5603	1.0770
1539	Grb14	-0.5607	1.5911
1540	Faah	-0.5663	0.8544

	Genes	log2FoldChange	nlog10(p-value)
1541	Tmem100	-0.5697	0.9958
1542	St6galnac5	-0.5768	2.0681
1543	Sh3gl3	-0.5774	1.6788
1544	Tro	-0.5792	2.9426
1545	Gsdme	-0.5796	2.0570
1546	B230312C02Rik	-0.5831	1.2514
1547	6530403H02Rik	-0.5844	0.2269
1548	Cald1	-0.5866	1.6762
1549	Gm43915	-0.5871	0.6310
1550	Arl15	-0.5881	3.6486
1551	4930455C13Rik	-0.5910	1.1064
1552	Ppp1r14c	-0.5930	1.4116
1553	Chst11	-0.5940	1.2697
1554	Dusp1	-0.5959	1.2539
1555	Cabp1	-0.5962	2.3061
1556	Lrfrn2	-0.6030	0.7080
1557	Gm15738	-0.6039	1.7113
1558	Adm	-0.6055	0.5269
1559	4921511C10Rik	-0.6077	1.0923
1560	Prtg	-0.6087	1.0681
1561	Astn1	-0.6093	8.7571
1562	Gm11149	-0.6120	3.0653
1563	Lpin2	-0.6128	3.1773
1564	Hpgds	-0.6169	0.6264
1565	Abcg2	-0.6204	1.3862
1566	1600010M07Rik	-0.6253	1.6000
1567	Gm28501	-0.6280	0.7817
1568	Cd55	-0.6325	2.1532
1569	C7	-0.6332	0.8941
1570	Serpini1	-0.6375	5.0166
1571	Plppr3	-0.6399	0.9487
1572	Ebf1	-0.6405	6.5832
1573	Dab2	-0.6439	0.1964
1574	Pex5l	-0.6473	2.7958
1575	Mbp	-0.6475	1.4793
1576	Hoxd4	-0.6521	2.1960
1577	Usp29	-0.6562	3.4213
1578	Fam78b	-0.6617	9.2318
1579	Ddx60	-0.6620	1.3256
1580	Dkk1	-0.6634	0.7490
1581	Nrcam	-0.6646	16.0363
1582	Nfe2l3	-0.6654	0.9807
1583	Plxna4	-0.6713	19.3383
1584	Il11ra1	-0.6715	1.5091
1585	Slc2a3	-0.6731	5.1862
1586	Gm15337	-0.6734	2.4603
1587	Ankrd6	-0.6781	7.9143
1588	Tmem150c	-0.6815	1.5104
1589	Rapgef5	-0.6829	7.7042
1590	Myh3	-0.6903	0.1312
1591	Aoah	-0.6918	0.4415
1592	Tenm3	-0.6981	8.8598
1593	Tm4sf4	-0.7082	1.3282
1594	Arhgap28	-0.7087	9.4892
1595	Adam19	-0.7110	5.5797

	Genes	log2FoldChange	nlog10(p-value)
1596	Gm49313	-0.7145	0.7536
1597	Plcb1	-0.7210	0.7829
1598	Glis1	-0.7243	1.9177
1599	Fhod3	-0.7258	3.6382
1600	Olfr889	-0.7265	0.4441
1601	9330175M20Rik	-0.7357	1.3942
1602	Gm26749	-0.7377	2.9180
1603	Gm15478	-0.7408	2.3987
1604	Lrrn3	-0.7434	1.9001
1605	Fosb	-0.7457	1.4277
1606	Etl4	-0.7503	3.0524
1607	Syt1	-0.7520	53.4508
1608	Fam13c	-0.7555	6.9683
1609	Tmod1	-0.7595	5.2039
1610	Hand1	-0.7690	3.4124
1611	Dtnb	-0.7748	12.0972
1612	Armc3	-0.7757	0.2944
1613	Ogn	-0.7806	0.3307
1614	Islr2	-0.7828	1.2309
1615	Pid1	-0.7851	8.1410
1616	Esr1	-0.7870	2.5120
1617	Elovl7	-0.8075	6.1622
1618	Slc4a4	-0.8093	6.4388
1619	Irf1	-0.8107	1.5347
1620	Ret	-0.8127	3.7156
1621	Hspb1	-0.8128	2.5429
1622	Elmo1	-0.8164	1.6454
1623	Runx1t1	-0.8165	0.7881
1624	B430010I23Rik	-0.8279	2.9613
1625	Pde8a	-0.8306	4.0389
1626	Cited2	-0.8314	0.7888
1627	Apba1	-0.8323	30.1275
1628	Syt2	-0.8353	10.3778
1629	Timp4	-0.8353	5.3027
1630	Prkd1	-0.8374	1.3947
1631	Fxyd2	-0.8380	3.1637
1632	Cd24a	-0.8407	2.4656
1633	Cntn6	-0.8428	0.8327
1634	Vtcn1	-0.8455	0.4294
1635	Tjp2	-0.8638	2.2380
1636	Fgf14	-0.8656	28.8564
1637	Nkain3	-0.8686	0.8745
1638	Gm13629	-0.8698	3.7737
1639	Magi2	-0.8733	36.4990
1640	Gm13187	-0.8773	2.0825
1641	Pde4b	-0.8854	34.3085
1642	Gucd1	-0.8867	1.3811
1643	Raly1	-0.8906	16.4210
1644	Spock3	-0.8940	14.9902
1645	L3mbtl4	-0.8978	13.0197
1646	Grm3	-0.8989	3.8176
1647	Slc35d3	-0.9130	1.2046
1648	Htr3b	-0.9172	3.2365
1649	Tub	-0.9319	16.4760
1650	Pakap-1	-0.9367	12.1468

	Genes	log2FoldChange	nlog10(p-value)
1651	Mpped2	-0.9377	7.1577
1652	Ablim1	-0.9404	37.0048
1653	Pcdh9	-0.9426	15.7168
1654	Sgcx	-0.9442	4.7178
1655	Msh5	-0.9448	0.6181
1656	Elavl2	-0.9580	45.4495
1657	Gm12216	-0.9601	4.0401
1658	Atpaf2	-0.9639	2.7423
1659	Chst8	-0.9665	3.8579
1660	Mndal	-0.9776	4.6282
1661	Igfbp6	-0.9885	1.4310
1662	Cntnap2	-0.9958	28.1182
1663	Fmn1	-1.0044	36.2120
1664	Epha5	-1.0046	25.4619
1665	Ncam2	-1.0059	21.9452
1666	Ednra	-1.0077	1.9666
1667	Chrna9	-1.0158	0.8988
1668	Cdon	-1.0217	3.5286
1669	Sntg1	-1.0224	4.6429
1670	Syn3	-1.0233	22.4873
1671	Gm16178	-1.0346	2.6583
1672	Mrc1	-1.0404	0.3980
1673	Dclk3	-1.0472	1.7773
1674	Scn3b	-1.0582	9.7533
1675	Eya4	-1.0713	4.1942
1676	2610316D01Rik	-1.0717	5.4974
1677	Myo16	-1.0799	4.0749
1678	Galnt16	-1.0836	11.0602
1679	St6galnac3	-1.0855	12.0163
1680	Cul4b	-1.0898	2.9993
1681	Itga6	-1.0903	2.9178
1682	Kcnk10	-1.0903	16.5705
1683	Gm16541	-1.1153	3.6588
1684	Greb1l	-1.1174	8.6123
1685	Gm45323	-1.1209	11.3715
1686	Slc6a15	-1.1262	10.5936
1687	Ttc29	-1.1280	0.7686
1688	Ror2	-1.1301	1.1140
1689	Kcnh7	-1.1321	18.6051
1690	Gda	-1.1361	1.1080
1691	Chrna5	-1.1382	3.4312
1692	Parp8	-1.1428	20.9072
1693	Cadm2	-1.1665	16.4565
1694	Trib2	-1.1675	3.7156
1695	Bmp4	-1.1779	3.1227
1696	Reps2	-1.1828	16.5616
1697	Fst	-1.1948	3.3196
1698	Map3k5	-1.1973	2.9328
1699	C130073E24Rik	-1.2093	23.2164
1700	Nfib	-1.2237	10.8081
1701	Kcnh8	-1.2286	9.4685
1702	Unc5c	-1.2386	17.3548
1703	Kcnj3	-1.2523	9.0899
1704	Clvs1	-1.2592	45.2063
1705	Gm1604a	-1.2645	16.3672

	Genes	log2FoldChange	nlog10(p-value)
1706	Maob	-1.2785	14.8619
1707	Plpp1	-1.2974	16.6304
1708	4930555F03Rik	-1.3091	7.5567
1709	Gm45341	-1.3207	13.2059
1710	Entpd3	-1.3287	10.6007
1711	Myo1b	-1.3388	11.4245
1712	Pakap	-1.3609	32.0852
1713	Gprn3	-1.3661	10.7239
1714	Dcc	-1.3668	8.9338
1715	Rab27b	-1.3696	8.5509
1716	Epha7	-1.3903	6.6272
1717	Bdkrb2	-1.4038	6.3438
1718	Gm4117	-1.4126	9.2367
1719	9330158H04Rik	-1.4166	11.3350
1720	Fstl4	-1.4297	3.6382
1721	3-Mar	-1.4603	5.9085
1722	Cntn3	-1.4636	36.6168
1723	Shisa9	-1.4666	24.5204
1724	Tnr	-1.4727	20.3841
1725	Dgkh	-1.4746	24.5999
1726	Htr3a	-1.5014	9.3992
1727	Rnf150	-1.5061	19.4851
1728	Filip1	-1.5125	31.0175
1729	Tmc3	-1.5131	9.3436
1730	Trpm3	-1.5165	14.9595
1731	B230216N24Rik	-1.5592	15.7568
1732	Susd5	-1.5717	3.6630
1733	Gm2516	-1.6032	10.0524
1734	Lmo7	-1.6145	6.1504
1735	4930587E11Rik	-1.6301	10.7663
1736	Gm45321	-1.6318	9.5771
1737	9530026P05Rik	-1.6599	5.2830
1738	Adamts9	-1.6660	3.3927
1739	Fbxl7	-1.6933	24.5204
1740	Slc9b2	-1.6998	10.1700
1741	Tshr	-1.7154	10.6338
1742	Lancl3	-1.7486	9.5285
1743	Banf2	-1.7547	6.4018
1744	Myl1	-1.7567	14.3744
1745	Fstl5	-1.7626	69.7471
1746	Gm28154	-1.7719	6.4208
1747	Tbc1d4	-1.7919	22.5222
1748	Astn2	-1.8093	14.6952
1749	Kcnc2	-1.8163	3.6851
1750	Rerg	-1.8199	7.5596
1751	Gm14211	-1.8238	12.9428
1752	Olfm3	-1.8365	4.2047
1753	Chrna7	-1.8423	24.8227
1754	Frmpd1	-1.8471	31.6477
1755	Syt16	-1.9000	11.5691
1756	Nrxn3	-1.9104	15.6453
1757	Olfir78	-1.9203	5.9932
1758	Cntnap5a	-1.9238	65.2833
1759	Itga2	-1.9355	10.3449
1760	A330102I10Rik	-1.9640	13.9781

	Genes	log2FoldChange	nlog10(p-value)
1761	Rftn1	-1.9908	16.2661
1762	Cpne9	-2.0798	11.4436
1763	Mapk4	-2.1082	13.5573
1764	Plcl1	-2.1160	46.9359
1765	Robo1	-2.1481	11.9202
1766	Tenm2	-2.1805	39.0995
1767	Fat4	-2.2099	12.3602
1768	Rxfp1	-2.2280	35.6821
1769	Myo1d	-2.2955	27.0232
1770	Cntn5	-2.3184	10.4375
1771	Caln1	-2.3465	10.3494
1772	Antxr2	-2.3656	36.6574
1773	Sgk1	-2.4229	26.9994
1774	Cyrr1	-2.4858	10.7724
1775	Hmx1	-2.4901	16.9852
1776	Cadm1	-2.5016	110.7532
1777	Thsd7a	-2.5872	95.0009
1778	Cdh6	-2.6190	46.3621
1779	Slit2	-2.8097	19.7980
1780	Prom1	-2.9056	36.9146
1781	Gm16070	-3.0034	60.2473
1782	Man2a1	-3.0036	124.9650
1783	Rorb	-3.1316	31.9885
1784	Brinp2	-3.2097	81.5032
1785	Tiam2	-3.2809	51.1848
1786	Zfp804a	-3.3154	84.4247
1787	Gm28153	-3.3427	34.2301
1788	Pcsk2	-3.3449	40.8680
1789	Tspan8	-3.3701	31.3188
1790	Crispld1	-3.5621	71.8401
1791	Dkk2	-3.8989	17.9623
1792	Lrrtm4	-4.3917	16.1932
1793	A830018L16Rik	-5.4573	275.6606
1794	Sctr	-5.5132	56.7794

Supplementary Table 2

[illegible]

	4, 5		SHOX2-Gq vs. TH-Gq	0.0297
Fig. 4g	10, 5 10, 5 10, 5 10, 13	ordinary one-way ANOVA with Dunnett's multiple comparisons test	Sated vs. RXFP1-Gq Sated vs. SHOX2-Gq Sated vs. TH-Gq Sated vs. FD	0.0169 0.8733 0.0008 0.0304
Fig. 5c	6, 4 6, 4 6, 6	ordinary one-way ANOVA with Dunnett's multiple comparisons test	WT vs. RXFP1-Gq WT vs. SHOX2-Gq WT vs. TH-Gq	0.7759 0.0007 0.0006
Fig. 5e	4	two-tailed paired <i>t</i> test	SHOX2-Gq, Veh vs. CNO	0.0088
Fig. 5f	5	two-tailed paired <i>t</i> test	RXFP1-Gq, Veh vs. CNO	0.3739
Fig. 5g	4 6	two-tailed paired <i>t</i> test	SHOX2-Gq, Veh vs. CNO RXFP1-Gq, Veh vs. CNO	0.0446 0.9489
Extended Data Fig. 9c	5	two-tailed paired <i>t</i> test	Before vs. After BDx	0.0251
Extended Data Fig. 9d	5	two-tailed paired <i>t</i> test	Before vs. After CCK	0.0452
Extended Data Fig. 9e	6, 4	two-tailed unpaired <i>t</i> test	Control vs. RXFP1-Cre;Ai32	0.0027
Extended Data Fig. 9f	4, 4	two-tailed unpaired <i>t</i> test	Control vs. TH-Cre;Ai32	0.007
Extended Data Fig. 9l	4,4 4,4 4,4 4,4 4,4 4,4 4,4 4,4 4,4 4,4 4,4 4,4 4,4 4,4 4,4 4,4 4,4 4,4 4,4 4,4	two-way ANOVA with Tukey's multiple comparisons test	t: 1 TH-Gq, Veh vs. TH-Gq, CNO t: 2 TH-Gq, Veh vs. TH-Gq, CNO t: 3 TH-Gq, Veh vs. TH-Gq, CNO t: 4 TH-Gq, Veh vs. TH-Gq, CNO t: 5 TH-Gq, Veh vs. TH-Gq, CNO t: 6 TH-Gq, Veh vs. TH-Gq, CNO t: 7 TH-Gq, Veh vs. TH-Gq, CNO t: 8 TH-Gq, Veh vs. TH-Gq, CNO t: 9 TH-Gq, Veh vs. TH-Gq, CNO t: 10 TH-Gq, Veh vs. TH-Gq, CNO t: 11 TH-Gq, Veh vs. TH-Gq, CNO t: 12 TH-Gq, Veh vs. TH-Gq, CNO t: 13 TH-Gq, Veh vs. TH-Gq, CNO t: 14 TH-Gq, Veh vs. TH-Gq, CNO t: 15 TH-Gq, Veh vs. TH-Gq, CNO t: 16 TH-Gq, Veh vs. TH-Gq, CNO t: 17 TH-Gq, Veh vs. TH-Gq, CNO t: 18 TH-Gq, Veh vs. TH-Gq, CNO t: 19 TH-Gq, Veh vs. TH-Gq, CNO t: 20 TH-Gq, Veh vs. TH-Gq, CNO	>0.9999 >0.9999 >0.9999 >0.9999 >0.9999 >0.9999 >0.9999 >0.9999 >0.9999 >0.9999 >0.9999 >0.9999 >0.9999 >0.9999 >0.9999 >0.9999 >0.9999 >0.9999 >0.9999 >0.9999
Extended Data Fig. 9m	10, 10	two-tailed unpaired <i>t</i> test	Sated vs. FD	<0.0001
Extended Data Fig. 9n	7	RM one-way ANOVA with Dunnett's multiple comparisons test	Veh vs. CNO20m Veh vs. CNO40m	0.4356 0.0351
Extended Data Fig. 9p	13, 7 13, 5	Kruskal-Wallis test with Dunnett's multiple comparisons test	WT vs. RXFP1-ablated WT vs. SHOX2-ablated	0.0031 >0.9999
Extended Data Fig. 10b	12	two-tailed paired <i>t</i> test	TH-Gq, Veh vs. CNO	0.0198
Extended Data Fig. 10c	6, 4	two-tailed unpaired <i>t</i> test	WT, Veh vs. SHOX2-Gq, Veh	0.4999
Extended Data Fig. 10d	5, 5	two-tailed unpaired <i>t</i> test	WT, CNO vs. SHOX2-Gq, CNO	0.0362
Extended Data Fig. 10e	7	two-tailed paired <i>t</i> test	TH-Gq, Veh vs. CNO	0.0001
Extended Data Fig. 10f	6	two-tailed paired <i>t</i> test	TH-TdT, Veh vs. CNO	>0.9999
Extended Data Fig. 10g	8	RM one-way ANOVA with Dunnett's multiple comparisons test	Veh vs. CNO Veh vs. CNO + Ant. CNO vs. CNO + Ant.	0.0017 0.3793 0.0242
Extended Data Fig. 10h	6	two-tailed paired <i>t</i> test	TH-Gq, Veh vs. CNO	0.014