

# EnrichmentHsSymbolsFile2 Top pathways by non-permutation

Geneset	stat	num.genes	pval	p.adj	gene.vals
REACTOME_NEURONAL_SYSTEM	-0.10651898	373	1.932e-12	1.254e-08	PPFIA4:25 ADCY1:59 APBA2:76 KCNQ3:77 KCNV1:81 KCNF1:85
BENPORATH_ES_WITH_H3K27ME3	-0.06619306	964	5.483e-12	1.779e-08	CSMD1:22 LMOD1:24 SYT6:64 GPR88:66 BRINP3:68 HSF4:70
MIKKELSEN_MEF_HCP_WITH_H3K27ME3	-0.08177322	546	8.014e-11	1.733e-07	CSMD1:22 UGT8:33 RYR2:36 PCNX2:52 IKZF1:58 CNTN4:65
KEGG_NEUROACTIVE_LIGAND_RECEPTOR_INTERAC	-0.11676754	259	1.086e-10	1.761e-07	VIPR2:74 VIPR1:90 GRM2:100 HTR1B:108 GABRB3:155 GABRR1:183
MEISSNER_NPC_HCP_WITH_H3K4ME2_AND_H3K27M	-0.09604884	328	2.506e-09	3.251e-06	RYR2:36 VIPR1:90 PTGFRN:157 ZNF536:164 KCNK1:188 GABRG3:220
BENPORATH_SUZ12_TARGETS	-0.05793459	899	5.260e-09	5.688e-06	CYP4X1:16 CSMD1:22 SYT6:64 GPR88:66 BRINP3:68 HSF4:70
NIKOLSKY_BREAST_CANCER_16P13_AMPLICON	0.16822174	99	7.502e-09	6.084e-06	PGAP6:155 SPSB3:409 ZNF213:534 PRSS27:545 WDR24:669 DECR2:696
REACTOME_SIGNALING_BY_GPCR	-0.06882152	614	7.116e-09	6.084e-06	ADCY1:59 VIPR2:74 GPR37L1:78 VIPR1:90 GRM2:100 HTR1B:108
NIKOLSKY_BREAST_CANCER_7P22_AMPLICON	-0.25975252	37	4.589e-08	2.977e-05	CHST12:177 ADAP1:342 INTS1:410 SUN1:625 FAM20C:791 TTYH3:823
KIM_ALL_DISORDERS_CALB1_CORR_UP	-0.07236026	493	4.362e-08	2.977e-05	CAMSAP2:15 DOCK4:34 RYR2:36 CHL1:47 SORL1:53 KCNF1:85
REACTOME_POTASSIUM_CHANNELS	-0.16410122	90	7.576e-08	4.469e-05	KCNQ3:77 KCNV1:81 KCNF1:85 KCNJ14:139 KCNA4:182 KCNK1:188
BLALOCK_ALZHEIMERS_DISEASE_DN	-0.04740953	1093	1.668e-07	9.019e-05	NETO2:20 HERC2:21 NOS1AP:27 LRRN3:37 CHL1:47 UAP1:54
WP_CALCIUM_REGULATION_IN_CARDIAC_CELLS	-0.13458043	126	1.874e-07	9.352e-05	RYR2:36 ADCY1:59 CACNA1S:98 CACNA1B:137 ITPR1:163 CHRM1:239
REACTOME_MUSCLE_CONTRACTION	-0.11146832	181	2.416e-07	1.119e-04	SCN9A:6 LMOD1:24 RYR2:36 KCNJ14:139 ITPR1:163 KCNK1:188
REACTOME_GPCR_LIGAND_BINDING	-0.07426275	394	4.647e-07	2.010e-04	VIPR2:74 GPR37L1:78 VIPR1:90 GRM2:100 HTR1B:108 PLPPR4:127
WP_MITOCHONDRIAL_COMPLEX_I_ASSEMBLY_MODE	0.21036859	47	6.095e-07	2.472e-04	ECSIT:44 COA1:107 DMAC2:454 TIMMDC1:488 TMEM186:630 TMEM126B:657
MIKKELSEN_MCV6_HCP_WITH_H3K27ME3	-0.07090886	414	8.220e-07	3.137e-04	PCNX2:52 SYT6:64 KCNQ3:77 HS3ST2:133 SLC35F3:169 DLGAP2:226
REACTOME_VOLTAGE_GATED_POTASSIUM_CHANNEL	-0.21792365	42	1.032e-06	3.718e-04	KCNQ3:77 KCNV1:81 KCNF1:85 KCNA4:182 KCNA10:201 KCNH4:251
WP_GPCRS_CLASS_A_RHODOPSINLIKE	-0.09866968	206	1.101e-06	3.760e-04	GPR37L1:78 HTR1B:108 HRH2:191 OPN3:222 CHRM1:239 GPR17:260
BENPORATH_EED_TARGETS	-0.04789432	902	1.335e-06	3.767e-04	CSMD1:22 GPR88:66 BRINP3:68 HSF4:70 VIPR2:74 KCNQ3:77
REACTOME_TRANSMISSION_ACROSS_CHEMICAL_SY	-0.09223649	234	1.233e-06	3.767e-04	PPFIA4:25 ADCY1:59 CACNA1B:137 GABRB3:155 GABRR1:183 KCNJ12:192
REACTOME_MITOCHONDRIAL_TRANSLATION	0.14648785	92	1.219e-06	3.767e-04	PTCD3:4 GFM2:90 GADD45GIP1:215 MRPS31:319 MTIF2:405 MRPS35:457
MARSON_BOUND_BY_E2F4_UNSTIMULATED	0.05687121	629	1.307e-06	3.767e-04	KIAA0825:3 KIF24:8 DLGAP5:17 UBAP2:26 TBCCD1:41 PARBP:60
MIKKELSEN_NPC_HCP_WITH_H3K27ME3	-0.07575345	326	2.766e-06	7.478e-04	RYR2:36 IKZF1:58 HECW1:61 VIPR1:90 ZNF536:164 GABRG3:220
REACTOME_CLASS_A_1_RHODOPSIN_LIKE_RECEPT	-0.07918166	294	3.195e-06	8.293e-04	GPR37L1:78 HTR1B:108 PLPPR4:127 TAC1:152 HRH2:191 S1PR1:212
MIKKELSEN_NPC_HCP_WITH_H3K4ME3_AND_H3K27	-0.09473430	198	4.480e-06	1.093e-03	CSMD1:22 ELFN1:56 GPR88:66 PTGFRN:157 CDHR1:186 KCNK1:188
REACTOME_G_ALPHA_I_SIGNALLING_EVENTS	-0.08262733	261	4.548e-06	1.093e-03	ADCY1:59 GPR37L1:78 GRM2:100 HTR1B:108 ITPR1:163 OPN3:222
REACTOME_COMPLEX_I_BIOGENESIS	0.18993316	48	5.336e-06	1.236e-03	ECSIT:44 COA1:107 TIMMDC1:488 NDUFA9:619 TMEM186:630 TMEM126B:657
BENPORATH_PRC2_TARGETS	-0.05466591	569	9.308e-06	2.082e-03	CSMD1:22 GPR88:66 BRINP3:68 HSF4:70 KCNQ3:77 KCNV1:81
REACTOME_TRANSPORT_OF_SMALL_MOLECULES	-0.05090792	651	1.067e-05	2.260e-03	WWP1:13 RYR2:36 TRPM1:44 SLC22A6:48 ATP11C:49 ADCY1:59
KEGG_CALCIUM_SIGNALING_PATHWAY	-0.09826203	169	1.080e-05	2.260e-03	RYR2:36 ADCY1:59 PHKB:71 CACNA1S:98 CACNA1B:137 PTK2B:162
REACTOME_G_ALPHA_S_SIGNALLING_EVENTS	-0.11045444	130	1.399e-05	2.837e-03	ADCY1:59 VIPR2:74 VIPR1:90 HRH2:191 MC4R:367 CRHR1:438
REACTOME_RESPIRATORY_ELECTRON_TRANSPORT_	0.12443488	101	1.577e-05	3.100e-03	ECSIT:44 LRPPRC:46 COA1:107 TIMMDC1:488 NDUFA9:619 TMEM186:630
YOSHIMURA_MAPK8_TARGETS_UP	-0.03915320	1087	1.628e-05	3.106e-03	SCN9A:6 APBA2:76 KCNQ3:77 RNF112:95 CACNA1S:98 AQP6:101
NIKOLSKY_BREAST_CANCER_15Q26_AMPLICON	-0.28450308	19	1.762e-05	3.266e-03	ARRDC4:200 SNRPA1:272 ALDH1A3:338 IGF1R:363 PCSK6:409 SYNM:492
REACTOME_CARDIAC_CONDUCTION	-0.11372780	119	1.862e-05	3.355e-03	SCN9A:6 RYR2:36 KCNJ14:139 ITPR1:163 KCNK1:188 KCNJ12:192
HAMAI_APOPTOSIS_VIA_TRAIL_UP	0.05126758	584	2.560e-05	4.490e-03	MBD4:6 CEP192:7 PTPN13:10 BPTF:13 BDP1:16 DLGAP5:17
FISCHER_DREAM_TARGETS	0.04272452	846	2.856e-05	4.752e-03	CEP192:7 KIF24:8 LCORL:15 DLGAP5:17 ATAD5:55 CEP295:56
REACTOME_NEUROTRANSMITTER_RECEPTORS_AND_	-0.09239928	173	2.838e-05	4.752e-03	ADCY1:59 GABRB3:155 GABRR1:183 KCNJ12:192 GABRG3:220 GRIK1:265
REACTOME_RESPIRATORY_ELECTRON_TRANSPORT	0.13176362	81	4.185e-05	6.788e-03	ECSIT:44 LRPPRC:46 COA1:107 TIMMDC1:488 NDUFA9:619 TMEM186:630