

# GSEA-c5-HsSymbols Toppathways by permulation

Geneset	stat	num.genes	pval	p.adj	gene.vals
GOBP_LEUKOTRIENE_CATABOLIC_PROCESS	0.4664719	2	2.231e-02	3.103e-01	DPEP2:407 DPEP1:666 NA NA NA NA
GOCC_NASCENT_POLYPEPTIDE_ASSOCIATED_COMP	0.4459899	2	2.891e-02	3.375e-01	NACA:216 BTF3:1544 NA NA NA NA
GOMF_TYPE_I_INTERFERON_RECEPTOR_BINDING	0.4329770	2	3.393e-02	3.642e-01	IFNE:766 IFNK:1416 NA NA NA NA
GOBP_REGULATION_OF_INTEGRIN_BIOSYNTHETIC	-0.4303278	3	9.834e-03	2.079e-01	TGFB2:622 NOX1:705 TMEFF2:2055 NA NA NA
GOBP_GLIAL_CELL_FATE_SPECIFICATION	-0.4157049	5	1.285e-03	6.060e-02	SOX9:263 PAX6:818 OLIG2:1606 NKX2-2:1723 ASCL1:2401 NA
GOBP_PHENYLPROPANOID_METABOLIC_PROCESS	-0.4071172	2	4.612e-02	4.120e-01	PON3:159 CYP1A1:2835 NA NA NA NA
GOBP_INTEGRIN_BIOSYNTHETIC_PROCESS	-0.4051793	4	5.005e-03	1.449e-01	TGFB2:622 NOX1:705 TMEFF2:2055 COL5A1:2741 NA NA
GOBP_NEGATIVE_REGULATION_OF_ATPASE_COUPL	0.3963285	2	5.221e-02	4.293e-01	THADA:18 TLR9:3353 NA NA NA NA
HP_ANTERIOR_BEAKING_OF_LUMBAR_VERTEBRAE	0.3935591	4	6.407e-03	1.684e-01	AGA:195 GALNS:650 GLB1:2856 GUSB:3206 NA NA
GOBP_VERY_LONG_CHAIN_FATTY_ACID_CATABOLI	-0.3935569	7	3.109e-04	2.129e-02	SLC27A2:155 SLC27A4:284 ACOX1:922 ABCD2:1256 ABCD3:1348 ABCD4:1691
GOBP_ESTABLISHMENT_OF_LEFT_RIGHT_ASYMMET	0.3893260	4	6.999e-03	1.732e-01	ENKUR:199 CFAP52:231 CFAP45:1333 CCDC39:5450 NA NA
GOMF_NEUTRAL_L_AMINO_ACID_SODIUM_SYMPORT	-0.3840163	8	1.689e-04	1.384e-02	SLC38A3:286 SLC6A5:320 SLC38A7:1075 SLC6A15:1451 SLC38A1:1695 SLC6A9:2106
GOBP_CELLULAR_RESPONSE_TO_AMMONIUM_ION	-0.3813600	5	3.143e-03	1.110e-01	KCNC2:54 CPS1:351 SLC1A1:494 GRIA1:3528 ASS1:5151 NA
HP_CHRONIC_GASTRITIS	0.3808401	3	2.233e-02	3.103e-01	FOCAD:1619 IPO8:2015 ELF4:2184 NA NA NA
GOMF_RRNA_CYTOSINE_METHYLTRANSFERASE_ACT	0.3765770	4	9.092e-03	1.986e-01	NSUN4:697 NOP2:1824 NSUN5:2490 METTL15:3019 NA NA
GOMF_OXIDOREDUCTASE_ACTIVITY_ACTING_ON_P	-0.3737551	2	6.712e-02	4.724e-01	CYP2U1:1554 CYP11A1:2512 NA NA NA NA
GOCC_RNA_POLYMERASE_I_COMPLEX	0.3737463	8	2.514e-04	1.833e-02	POLR1B:560 POLR2H:784 POLR1D:1110 POLR1A:1497 POLR1E:1835 POLR2F:2332
GOMF_RNA_POLYMERASE_I_ACTIVITY	0.3737463	8	2.514e-04	1.833e-02	POLR1B:560 POLR2H:784 POLR1D:1110 POLR1A:1497 POLR1E:1835 POLR2F:2332
GOMF_HISTAMINE_RECEPTOR_ACTIVITY	-0.3727808	6	1.565e-03	7.067e-02	HRH4:119 HRH1:912 HTR6:1125 HRH2:1211 ZNF219:3985 HRH3:4956
HP_OSTEOLYTIC_DEFECTS_OF_THE_DISTAL_PHAL	0.3718773	5	3.977e-03	1.265e-01	CTSK:174 ZMPSTE24:1137 BANF1:2321 MTX2:3299 LMNA:3481 NA
GOBP_RESPONSE_TO_AMMONIUM_ION	-0.3651547	6	1.950e-03	8.160e-02	KCNC2:54 CPS1:351 SLC1A1:494 ADSS2:3481 GRIA1:3528 ASS1:5151
GOBP_TOLERANCE_INDUCION_DEPENDENT_UPON_	0.3600764	4	1.262e-02	2.355e-01	CD274:850 AIRE:2136 HAVCR2:2251 FOXP3:3865 NA NA
GOCC_CATSPER_COMPLEX	0.3569377	13	8.347e-06	1.314e-03	CATSPERB:28 CATSPERG:386 CATSPERE:447 TMEM249:895 CATSPER4:1342 C2CD6:1473
GOBP_SCHWANN_CELL_MIGRATION	0.3567895	4	1.345e-02	2.450e-01	NF1:85 RRAS:940 CERS2:3093 RRAS2:5199 NA NA
GOBP_REGULATION_OF_GLUCOSYLCERAMIDASE_AC	-0.3564268	2	8.082e-02	5.021e-01	SCARB2:2196 ATP13A2:2427 NA NA NA NA
HP_GLUCOCORTOCOID_INSENSITIVE_PRIMARY_HY	-0.3512252	5	6.527e-03	1.698e-01	SCNN1G:728 SCNN1B:1634 KCNJ5:1689 CLCN2:2186 SCNN1A:5771 NA
GOBP_ICOSANOID_CATABOLIC_PROCESS	0.3507338	5	6.603e-03	1.704e-01	DPEP2:407 DPEP1:666 ABHD16A:1224 LYPLA2:3331 HPGD:6497 NA
GOBP_C_5_METHYLATION_OF_CYTOSINE	0.3494721	5	6.800e-03	1.723e-01	DNMT3A:525 DNMT3L:1060 DNMT1:3196 DNMT3B:3508 STPG4:3941 NA
GOMF_ARYLESTERASE_ACTIVITY	-0.3490835	6	3.063e-03	1.092e-01	PON3:159 PON2:321 CA2:716 PON1:1819 APMAP:3372 CA1:8255
GOMF_OPSONIN_RECEPTOR_ACTIVITY	0.3485890	4	1.575e-02	2.681e-01	C3AR1:1117 CD14:1613 C5AR2:2252 C5AR1:4878 NA NA
GOBP_NEGATIVE_REGULATION_OF_IRE1_MEDIATE	0.3482104	5	7.003e-03	1.732e-01	HSPA5:626 UFL1:690 BFAR:691 DDRGK1:1046 DNAJB9:9261 NA
GOBP_GLUTAMATE_BIOSYNTHETIC_PROCESS	-0.3459827	4	1.655e-02	2.754e-01	GLUD1:39 GLS:2892 GLS2:2947 SLC25A12:4049 NA NA
HP_HIGH_FREQUENCY_SENSORINEURAL_HEARING_	0.3456206	5	7.437e-03	1.797e-01	CEP250:1073 ZMPSTE24:1137 ASAH1:2322 LMNA:3481 FKBP14:4542 NA
GOBP_SPINDLE_ASSEMBLY_INVOLVED_IN_FEMALE	0.3455085	6	3.378e-03	1.145e-01	FBXO5:600 NDC80:758 SEPTIN1:2112 AURKA:2650 CCNB2:2705 TUBB8:6229
GOBP_L_GLUTAMINE_IMPORT_ACROSS_PLASMA_ME	-0.3449535	4	1.687e-02	2.774e-01	SLC38A3:286 SLC38A1:1695 SLC38A2:3348 SLC38A5:4678 NA NA
HP_THINNING_OF_DESCMET_MEMBRANE	-0.3431768	5	7.867e-03	1.865e-01	PAX6:818 FOXC1:976 PITX2:2494 OVOL2:2572 CYP1B1:5768 NA
GOMF_GAMMA_AMINOBUTYRIC_ACID_SODIUM_CHLO	-0.3425526	5	7.981e-03	1.869e-01	SLC6A6:357 SLC6A11:619 SLC6A13:2926 SLC6A1:3482 SLC6A12:5318 NA
GOBP_LIPID_TRANSPORT_ACROSS_BLOOD_BRAIN_	-0.3412693	6	3.790e-03	1.232e-01	FABP5:249 SLC27A4:284 CD36:694 SLC27A1:1019 MFSD2A:4992 APOE:8150
HP_LEG_DYSTONIA	0.3411586	6	3.802e-03	1.233e-01	AOPEP:957 GFM2:1260 PARK7:2151 KMT2B:2667 VPS16:2809 ACTB:5651
GOMF_OLEATE_TRANSMEMBRANE_TRANSPORTER_AC	-0.3406716	6	3.852e-03	1.242e-01	SLC27A2:155 SLC27A4:284 CD36:694 SLC27A1:1019 MFSD2A:4992 SLC27A6:8309