

# GSEA-c5-HsSymbols Top pathways by non-permutation

Geneset	stat	num.genes	pval	p.adj	gene.vals
HP_LAMELLAR_CATARACT	0.4600295	5	3.671e-04	1.255e-02	HSF4:74 MIP:603 CRYBA4:687 BFSP1:868 CRYGB:966 NA
HP_GRANULOCYTIC_HYPERPLASIA	-0.4538957	5	4.395e-04	1.426e-02	TET2:92 ASXL1:598 CSF3R:603 KIT:713 IRF8:1706 NA
GOMF_STRUCTURAL_CONSTITUENT_OF_POSTSYNAP	0.4419580	3	8.016e-03	1.003e-01	ACTBL2:231 DBNL:421 ACTL9:2115 NA NA NA
GOBP_REGULATION_OF_TOLL_LIKE_RECEPTOR_7_	0.4387372	3	8.487e-03	1.037e-01	RSAD2:251 SLC15A4:652 PTPN22:2022 NA NA NA
GOBP_NEGATIVE_REGULATION_OF_DENDRITIC_CE	0.4303943	3	9.822e-03	1.130e-01	ZBTB46:837 FCGR2B:906 TMEM176B:1578 NA NA NA
GOBP_ONCOSTATIN_M_MEDIATED_SIGNALING_PAT	0.4286357	5	9.017e-04	2.312e-02	PRLR:747 IL6ST:814 OSMR:936 LIFR:1297 IL13RA1:1894 NA
HP_ACHROMATOPSIA	0.4225607	4	3.421e-03	5.918e-02	ATF6:53 GNAT2:325 CNGB3:369 CNGA3:4220 NA NA
GOMF_3_BETA_HYDROXY_DELTA5_STEROID_DEHYD	-0.4176700	5	1.218e-03	2.823e-02	HSD3B2:652 SDR42E1:954 NSDHL:1272 HSD3B7:1575 SDR42E2:2159 NA
GOBP_VITAMIN_D3_METABOLIC_PROCESS	-0.4137534	3	1.306e-02	1.344e-01	CYP27A1:583 CYP2R1:814 CYP27B1:2762 NA NA NA
GOCC_DENSE_BODY	0.4101631	4	4.494e-03	7.011e-02	SND1:432 PIWIL1:707 PIWIL2:2051 ACTG1:2532 NA NA
GOBP_DOUBLE_STRAND_BREAK_REPAIR_VIA_SING	-0.4099711	8	5.928e-05	3.089e-03	SLX4:1 HELQ:191 OGG1:435 SLX1A:916 SLX1B:919 RBBP8:1526
GOMF_ESTROGEN_2_HYDROXYLASE_ACTIVITY	-0.3981817	2	5.112e-02	2.861e-01	CYP1A1:407 CYP1A2:2871 NA NA NA NA
HP_CORTICOSPINAL_TRACT_HYPOPLASIA	0.3962975	6	7.741e-04	2.078e-02	RAI1:211 L1CAM:702 DEAF1:774 FLII:1068 PDHB:3077 IQSEC2:4116
GOBP_ADENYLATE_CYCLASE_INHIBITING_SEROTO	0.3931096	6	8.534e-04	2.216e-02	HTR5A:244 HTR1D:750 HTR1B:822 HTR1F:2014 HTR1A:2207 HTR1E:4197
GOBP_COBALAMIN_TRANSPORT	-0.3904720	7	3.465e-04	1.200e-02	CUBN:189 TCN2:1012 TCN1:1511 AMN:1768 ABCD4:1897 ABCC1:2228
GOMF_HAPTOGLOBIN_BINDING	-0.3865105	3	2.041e-02	1.739e-01	HBM:1435 HBQ1:1786 HBE1:2248 NA NA NA
GOMF_ALKALINE_PHOSPHATASE_ACTIVITY	-0.3861974	3	2.051e-02	1.744e-01	CILP2:908 ALPL:2057 CILP:2514 NA NA NA
GOBP_TETRAHYDROFOLATE_BIOSYNTHETIC_PROCE	0.3809859	3	2.228e-02	1.821e-01	DHFR:616 ATIC:1879 GCH1:3200 NA NA NA
GOBP_TOLERANCE_INDUCION_DEPENDENT_UPON_	-0.3785901	4	8.728e-03	1.053e-01	AIRE:294 FOXP3:578 CD274:3271 HAVCR2:3670 NA NA
GOMF_RRNA_CYTOSINE_METHYLTRANSFERASE_ACT	-0.3734398	4	9.686e-03	1.119e-01	NSUN5:520 NOP2:1153 METTL15:2929 NSUN4:3543 NA NA
GOBP_POSITIVE_REGULATION_OF_CELL_ADHESIO	0.3704039	2	6.961e-02	3.330e-01	CAV1:516 IL1B:3630 NA NA NA NA
GOBP_NEUROTROPHIN_PRODUCTION	0.3697537	5	4.190e-03	6.725e-02	PCSK6:465 ADORA1:912 HAP1:1498 NPY:1544 FURIN:5983 NA
HP_CONGENITAL_ADRENAL_HYPERPLASIA	-0.3691786	4	1.055e-02	1.188e-01	CYP17A1:94 HSD3B2:652 STAR:1599 POR:6066 NA NA
HP_DEFICIENT_EXCISION_OF_UV_INDUCED_PYRI	-0.3690826	5	4.259e-03	6.790e-02	FANCE:1494 FANCD2:1744 FANCA:1751 ERCC4:1771 FANCC:3779 NA
GOBP_ANTIBODY_DEPENDENT_CELLULAR_CYTOTOX	0.3671856	3	2.761e-02	2.030e-01	FCGR2B:906 FCGR1A:2393 FCGR3A:3047 NA NA NA
GOBP_NEGATIVE_REGULATION_OF_CELL_VOLUME	0.3639554	5	4.823e-03	7.291e-02	SHANK3:468 CLCN3:1361 P2RX7:1663 ANO6:3690 KCNMA1:3691 NA
GOBP_RESPONSE_TO_ERYTHROPOIETIN	-0.3639424	3	2.901e-02	2.083e-01	KIT:713 EPOR:1878 EPO:3972 NA NA NA
GOBP_CHITIN_METABOLIC_PROCESS	0.3596703	3	3.095e-02	2.161e-01	CHI3L1:909 CHIT1:1301 CTBS:4521 NA NA NA
GOMF_CHITINASE_ACTIVITY	0.3596703	3	3.095e-02	2.161e-01	CHI3L1:909 CHIT1:1301 CTBS:4521 NA NA NA
HP_ANAL_FISSURE	0.3589619	4	1.290e-02	1.335e-01	EGFR:84 ADAM17:1013 CYBC1:2268 COL7A1:5643 NA NA
GOBP_DETOXIFICATION_OF_NITROGEN_COMPOUND	0.3582595	2	7.927e-02	3.559e-01	MTARC2:1035 MTARC1:3493 NA NA NA NA
GOBP_OPERANT_CONDITIONING	0.3580901	5	5.551e-03	8.007e-02	TACR1:271 DRD1:296 TACR2:639 PDE8B:1901 AGT:8263 NA
GOBP_GONADAL_MESODERM_DEVELOPMENT	-0.3573537	2	8.003e-02	3.578e-01	AMH:353 ZFPM2:4231 NA NA NA NA
GOBP_MITOCHONDRIAL_RNA_CATABOLIC_PROCESS	-0.3566555	6	2.481e-03	4.707e-02	LRPPRC:113 PDE12:456 PNPT1:2022 SUPV3L1:2616 GRSF1:3664 SLIRP:4971
GOMF_AMINO_ACID_MONOATOMIC_CATION_ANTIPO	0.3566405	5	5.745e-03	8.162e-02	SLC25A12:1348 SLC38A3:1808 SLC38A5:1852 SLC25A13:2596 SLC32A1:3830 NA
GOMF_PHOSPHATIDYLCHOLINE_STEROL_O_ACYLTR	0.3562244	5	5.802e-03	8.228e-02	APOA1:262 APOA2:309 APOA4:2122 APOE:2252 APOA5:6543 NA
GOBP_INTERMEDIATE_FILAMENT_BUNDLE_ASSEMB	0.3528555	5	6.283e-03	8.664e-02	PKP1:18 KRT14:260 NEFM:1731 NEFL:4239 PKP2:5520 NA
HP_BLIND_VAGINA	-0.3526372	4	1.458e-02	1.445e-01	CYP17A1:94 MTM1:1608 WT1:1846 MAMLD1:5927 NA NA
HP_IMPAIRED_RENAL_CONCENTRATING_ABILITY	-0.3524944	6	2.787e-03	5.080e-02	CLCNKA:289 CLCNKB:324 CEP290:965 BSND:1459 NPHP1:4045 FAM20A:7124
GOBP_TYPE_II_HYPERSENSITIVITY	0.3500034	4	1.533e-02	1.482e-01	FCGR2B:906 FCGR1A:2393 FCGR3A:3047 C3:3219 NA NA