

# DisGeNET Top pathways by permulation

Geneset	stat	num.genes	pval	p.adj	gene.vals
Ciliary Motility Disorders	0.20709555	55	1.109e-07	1.023e-03	DNAH11:19 DNAI2:36 CCDC65:326 DNAH9:435 DNAH5:728 SPEF2:820
DiGeorge Syndrome	-0.19898041	57	2.088e-07	1.023e-03	PRODH:8 COMT:10 ARVCF:32 ALB:80 SPECC1L:151 NDST1:327
Impaired T cell function	-0.35315601	17	4.649e-07	1.519e-03	COMT:10 ARVCF:32 TNFRSF13B:258 UFD1:383 UMPS:428 CD19:565
Posterior embryotoxon	-0.25495313	31	9.072e-07	2.223e-03	COMT:10 ARVCF:32 UFD1:383 PEX2:407 JAG1:993 HIRA:1025
Seborrheic dermatitis	-0.31300806	20	1.267e-06	2.484e-03	COMT:10 ARVCF:32 SLCO2A1:46 UFD1:383 HIRA:1025 TBX1:1600
Embryotoxon	-0.25222446	30	1.758e-06	2.873e-03	COMT:10 ARVCF:32 UFD1:383 PEX2:407 JAG1:993 HIRA:1025
Polynesian Bronchiectasis	0.23541034	34	2.054e-06	2.876e-03	DNAH11:19 DNAI2:36 CCDC65:326 DNAH5:728 STK36:928 RSPH3:1118
Tetany	-0.30203645	20	2.939e-06	3.602e-03	COMT:10 ARVCF:32 SLC12A1:221 CASR:265 UFD1:383 TRPM6:904
22q11 Deletion Syndrome	-0.31090120	18	4.979e-06	5.424e-03	PRODH:8 COMT:10 ARVCF:32 UFD1:383 CXCR4:425 ZDHHC8:434
22q11 partial monosomy syndrome	-0.38897450	11	7.942e-06	7.786e-03	COMT:10 ARVCF:32 UFD1:383 PI4KA:789 HIRA:1025 TBX1:1600
Trisomy	-0.10341521	156	8.794e-06	7.837e-03	LPL:67 ALB:80 PAX5:231 MDM2:345 IL6:430 LTBR:454
Small earlobe	-0.33504955	13	2.886e-05	2.357e-02	COMT:10 ARVCF:32 UFD1:383 KCTD1:694 HIRA:1025 TBX1:1600
Dysseborrheic dermatitis	-0.30832704	15	3.567e-05	2.498e-02	COMT:10 ARVCF:32 SLCO2A1:46 UFD1:383 HIRA:1025 TBX1:1600
Shprintzen syndrome	-0.21873424	30	3.401e-05	2.498e-02	PRODH:8 COMT:10 ARVCF:32 UFD1:383 HIRA:1025 DGCR6L:1305
Hereditary spherocytosis	-0.24775670	23	3.924e-05	2.565e-02	SLC4A1:27 EPB42:42 SPTB:85 ANK1:119 SPTA1:135 SDS:167
Occipital myelomeningocele	-0.38935500	9	5.241e-05	3.022e-02	COMT:10 ARVCF:32 UFD1:383 HIRA:1025 TBX1:1600 GP1BB:2218
Reticulocyte count (procedure)	-0.09306753	160	5.113e-05	3.022e-02	IQGAP2:7 SLC4A1:27 CD2AP:69 SPTB:85 ANK1:119 SPTA1:135
Abnormality of the tonsils	-0.34467567	11	7.557e-05	4.116e-02	COMT:10 ARVCF:32 UFD1:383 HIRA:1025 TBX1:1600 GP1BB:2218
Anemia, Sickle Cell	-0.08760053	169	8.976e-05	4.543e-02	COMT:10 ALB:80 HBE1:124 SPTA1:135 KEL:275 RHD:296
Ewings sarcoma	-0.06934227	271	9.268e-05	4.543e-02	PAK3:39 LRP1:91 CASP8:191 ABCB1:209 LOX:227 FCGRT:291
Anemia, hereditary spherocytic hemolytic	-0.49417932	5	1.297e-04	4.956e-02	SLC4A1:27 EPB42:42 SPTB:85 ANK1:119 SPTA1:135 NA
Congenital atresia of nasopharynx	0.34929518	10	1.310e-04	4.956e-02	DNAH11:19 DNAH5:728 GAS8:1163 DRC1:1213 ARMC4:1815 DNAI1:2131
Kartagener Syndrome	0.11965410	88	1.072e-04	4.956e-02	DNAH11:19 DNAI2:36 CFTR:81 DNAH3:232 CCDC65:326 DNAH9:435
Mental deficiency	-0.03846442	890	1.314e-04	4.956e-02	PRODH:8 TAT:33 PAK3:39 CLCNKB:50 CLCNKA:51 GTF2IRD1:54
Other specified congenital malformations	0.34929518	10	1.310e-04	4.956e-02	DNAH11:19 DNAH5:728 GAS8:1163 DRC1:1213 ARMC4:1815 DNAI1:2131
Spherocytosis	-0.49417932	5	1.297e-04	4.956e-02	SLC4A1:27 EPB42:42 SPTB:85 ANK1:119 SPTA1:135 NA
Poor school performance	-0.03912154	849	1.415e-04	5.126e-02	PRODH:8 TAT:33 PAK3:39 CLCNKB:50 CLCNKA:51 GTF2IRD1:54
Upward slant of palpebral fissure	-0.10595977	108	1.464e-04	5.126e-02	COMT:10 ARVCF:32 EHMT1:273 UFD1:383 PEX2:407 CDK13:417
Solid Neoplasm	-0.04382415	658	1.536e-04	5.194e-02	TAT:33 LPL:67 BUB1:76 ALB:80 PGLYRP1:83 ANK1:119
Liver neoplasms	-0.03547721	1006	1.916e-04	6.261e-02	IQGAP2:7 COMT:10 KDM4B:21 TAT:33 LPL:67 ALB:80
Hepatocarcinogenesis	-0.05426388	395	2.393e-04	7.358e-02	KDM4B:21 NUP62:63 ALB:80 CLU:114 PTGES:117 ARG1:125
Increased variability in muscle fiber di	0.21663236	24	2.402e-04	7.358e-02	TCAP:145 ITGA7:555 SELENON:829 TWNK:1469 SQSTM1:2146 COL6A1:2205
Leukemia, Myelocytic, Acute	-0.03105901	1265	2.970e-04	7.770e-02	TAT:33 PAK3:39 RHEBL1:60 BUB1:76 WDHD1:88 LRP1:91
Pain, Postoperative	-0.22973881	21	2.688e-04	7.770e-02	COMT:10 TRPV1:133 ABCB1:209 LIF:566 SCN9A:735 AP3B1:962
Abnormality of aortic arch	-0.31474135	11	3.012e-04	7.770e-02	COMT:10 ARVCF:32 UFD1:383 HIRA:1025 TBX1:1600 GP1BB:2218
Bilateral cataracts (disorder)	-0.10549628	100	2.737e-04	7.770e-02	ADAM9:47 PAX5:231 CASR:265 MGST1:333 IFNGR1:341 GSTO1:389
Breast adenocarcinoma	-0.08948959	139	2.798e-04	7.770e-02	CASP8:191 ABCB1:209 GCLC:215 HSPB1:301 MDM2:345 VEGFA:446
Fabry Disease	-0.16580585	40	2.874e-04	7.770e-02	MANBA:142 ABCB1:209 NAGA:287 VCAM1:305 IL6:430 VEGFA:446
Leprosy, Paucibacillary	-0.29684877	12	3.705e-04	8.859e-02	LRP1:91 SCAF1:104 CHERP:798 SLC11A1:808 C1D:1441 CYFIP1:1487
CONOTRUNCAL ANOMALY FACE SYNDROME	-0.22508768	21	3.572e-04	8.859e-02	COMT:10 ARVCF:32 UFD1:383 HIRA:1025 DGCR6:1380 TBX1:1600