

GeDiPNet Cluster 579 -- Enriched GO Terms (Biological Process)

GO term enrichment: Biological Process terms (gene2go, human/tax_id=9606 only), upper-tail hypergeometric test, fold enrichment = (overlap / cluster gene count) / (term gene count / universe size), Benjamini-Hochberg FDR-corrected. Top 15 terms per cluster by q-value. See scripts/build_cluster_go_enrichment.php on gedipnet.bicnirrh.res.in. Data as of: 2026-10-20 03:23:14. · Rows: 15 · Generated: 2026-10-19 23:18:33

GO Term	GO ID	Overlap Genes	Overlap Gene Names	Term Gene Count	Cluster Gene Count	Fold Enrichment	P-value	FDR Q-value
adenylate cyclase-inhibiting G protein-coupled glutamate receptor signaling pathway	GO:0007196	5	GRM1, GRM2, GRM3, GRM4, GRM5	9	34	305.34	1.838e-12	8.347e-10
chemical synaptic transmission	GO:0007268	10	GRM1, GRM2, GRM3, GRM4, GRM5, KCNC4, NPY, PDYN, SLC12A5, SLC1A1	236	34	23.29	8.576e-12	3.320e-9
G protein-coupled glutamate receptor signaling pathway	GO:0007216	5	GRM1, GRM2, GRM3, GRM4, GRM5	14	34	196.29	2.901e-11	9.984e-9
synaptic signaling via neuropeptide	GO:0099538	4	GRID2, GRM1, NPY, NPY2R	9	34	244.27	1.143e-9	2.602e-7
regulation of synaptic transmission, glutamatergic	GO:0051966	5	GRM1, GRM2, GRM3, GRM4, GRM5	33	34	83.28	3.356e-9	6.740e-7
positive regulation of MAPK cascade	GO:0043410	7	GRM1, GRM4, GRM5, KDR, P2RX7, TEK, VEGFA	224	34	17.18	1.323e-7	1.607e-5
monoatomic ion transport	GO:0006811	10	GRID2, KCNAB1, KCNC4, NALCN, P2RX4, P2RX7, SLC12A2, SLC12A5, SLC1A1, TRPV1	667	34	8.24	1.894e-7	2.157e-5
locomotory behavior	GO:0007626	5	GRM1, GRM5, NPY2R, SLC1A1, RELN	99	34	27.76	9.284e-7	8.097e-5
sensory perception of pain	GO:0019233	4	GRM1, P2RX4, P2RX7, TRPV1	44	34	49.97	1.177e-6	9.825e-5
positive regulation of endothelial cell chemotaxis	GO:2001028	3	KDR, P2RX4, VEGFA	13	34	126.83	1.554e-6	1.236e-4
positive regulation of phosphatidylinositol 3-kinase/protein kinase B signal transduction	GO:0051897	6	GRM2, KDR, P2RX4, TEK, VEGFA, RELN	217	34	15.20	2.346e-6	1.727e-4
cellular response to ATP	GO:0071318	3	P2RX4, P2RX7, TRPV1	19	34	86.78	5.227e-6	3.277e-4
glutamate receptor signaling pathway	GO:0007215	3	GRID2, GRM2, SLC1A1	19	34	86.78	5.227e-6	3.277e-4
monoatomic ion transmembrane transport	GO:0034220	7	GRID2, ANO4, KCNC4, NALCN, P2RX4, P2RX7, TRPV1	404	34	9.52	6.809e-6	4.034e-4
potassium ion transmembrane transport	GO:0071805	5	KCNAB1, KCNC4, NALCN, P2RX7, SLC12A5	150	34	18.32	7.188e-6	4.212e-4