

GeDiPNet Cluster 138 -- Enriched Pathways

Pathway enrichment: KEGG + Reactome, upper-tail hypergeometric test, Benjamini-Hochberg FDR-corrected. Fold enrichment = (overlap / cluster gene count) / (pathway gene count / universe size). Top 15 pathways per cluster by q-value. See [scripts/build_cluster_enrichment.php](#) on [gedipnet.bicnirrh.res.in](#). Data as of: 2026-10-08 03:30:07. · Rows: 15 · Generated: 2026-10-08 00:47:42

Pathway	Source	Overlap Genes	Overlap Gene Names	Pathway Gene Count	Cluster Gene Count	Fold Enrichment	P-value	FDR Q-value
Pathways in cancer	KEGG	10	AGT, EDN1, FGF8, NOS2, BCL2L11, CBL, COL4A2, IL12RB2, NFKBIA, CXCR4	533	45	5.01	2.133e-5	6.437e-4
AGE-RAGE signaling pathway in diabetic complications	KEGG	5	AGT, EDN1, VCAM1, COL4A2, NOS3	101	45	13.21	3.562e-5	9.786e-4
Nitric oxide stimulates guanylate cyclase	Reactome	2	NOS2, NOS3	3	45	177.93	4.109e-5	1.106e-3
Cytokine-cytokine receptor interaction	KEGG	7	ACVRL1, CXCR2, CCR3, IL12RB2, TSLP, CSF3, CXCR4	298	45	6.27	1.090e-4	2.432e-3
Relaxin signaling pathway	KEGG	5	EDN1, NOS2, COL4A2, NFKBIA, NOS3	130	45	10.26	1.188e-4	2.602e-3
Human cytomegalovirus infection	KEGG	6	CXCR2, CCR3, NFKBIA, PTK2B, HLA-A, CXCR4	226	45	7.09	1.832e-4	3.690e-3
Chemokine signaling pathway	KEGG	5	CXCR2, CCR3, NFKBIA, PTK2B, CXCR4	193	45	6.91	7.379e-4	1.102e-2
Arginine and proline metabolism	KEGG	3	NOS2, NOS3, P4HA2	50	45	16.01	8.519e-4	1.229e-2
Malaria	KEGG	3	SELP, VCAM1, CSF3	50	45	16.01	8.519e-4	1.229e-2
TNF signaling pathway	KEGG	4	EDN1, VCAM1, IRF1, NFKBIA	119	45	8.97	9.978e-4	1.390e-2
Platelet degranulation	Reactome	4	SELP, PLG, SERPINA1, SERPINA3	123	45	8.68	1.128e-3	1.522e-2
Chemokine receptors bind chemokines	Reactome	3	CXCR2, CCR3, CXCR4	59	45	13.57	1.380e-3	1.776e-2
Deregulated CDK5 triggers multiple neurodegenerative pathways in Alzheimer's disease models	Reactome	2	BCL2L11, CAST	16	45	33.36	1.593e-3	1.976e-2
Calcium signaling pathway	KEGG	5	FGF8, NOS2, NOS3, PTK2B, CXCR4	254	45	5.25	2.491e-3	2.744e-2
Cell adhesion molecules	KEGG	4	SELP, VCAM1, CTLA4, HLA-A	160	45	6.67	2.956e-3	3.093e-2