

GeDiPNet Cluster 197 -- 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](https://gedipnet.bicnirrh.res.in/scripts/build_cluster_enrichment.php) on gedipnet.bicnirrh.res.in. Data as of: 2026-10-07 03:30:09. · Rows: 15 · Generated: 2026-10-07 18:04:41

Pathway	Source	Overlap Genes	Overlap Gene Names	Pathway Gene Count	Cluster Gene Count	Fold Enrichment	P-value	FDR Q-value
WNT mediated activation of DVL	Reactome	2	DVL3, CSNK2B	9	33	80.88	2.604e-4	4.799e-3
Synthesis of PIPs at the Golgi membrane	Reactome	2	ARF3, INPP5E	18	33	40.44	1.090e-3	1.447e-2
Loss of MECP2 binding ability to 5hmC-DNA	Reactome	1	MECP2	1	33	363.94	2.748e-3	2.889e-2
Defective SLC12A6 causes agenesis of the corpus callosum, with peripheral neuropathy (ACCPN)	Reactome	1	SLC12A6	1	33	363.94	2.748e-3	2.889e-2
Defective ABCC9 causes dilated cardiomyopathy 10, familial atrial fibrillation 12 and hypertrichotic osteochondrodysplasia	Reactome	1	ABCC9	2	33	181.97	5.488e-3	4.649e-2
ARL13B-mediated ciliary trafficking of INPP5E	Reactome	1	INPP5E	3	33	121.31	8.221e-3	6.073e-2
Loss of MECP2 binding ability to 5mC-DNA	Reactome	1	MECP2	3	33	121.31	8.221e-3	6.073e-2
ATP sensitive Potassium channels	Reactome	1	ABCC9	4	33	90.98	1.095e-2	7.246e-2
RSK activation	Reactome	1	RPS6KA3	4	33	90.98	1.095e-2	7.246e-2
MECP2 regulates neuronal receptors and channels	Reactome	1	MECP2	4	33	90.98	1.095e-2	7.246e-2
Telomere C-strand (Lagging Strand) Synthesis	Reactome	1	POLD1	5	33	72.79	1.367e-2	8.229e-2
CREB1 phosphorylation through NMDA receptor-mediated activation of RAS signaling	Reactome	1	RPS6KA3	5	33	72.79	1.367e-2	8.229e-2
Regulation of MECP2 expression and activity	Reactome	1	MECP2	6	33	60.66	1.638e-2	9.168e-2
ChREBP activates metabolic gene expression	Reactome	1	FASN	7	33	51.99	1.908e-2	1.001e-1
Cation-coupled Chloride cotransporters	Reactome	1	SLC12A6	7	33	51.99	1.908e-2	1.001e-1