

GeDiPNet Cluster 22 -- 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: 2026-10-08 03:23:04. · Rows: 15 · Generated: 2026-10-08 16:46:48

GO Term	GO ID	Overlap Genes	Overlap Gene Names	Term Gene Count	Cluster Gene Count	Fold Enrichment	P-value	FDR Q-value
mitochondrial DNA replication	GO:0006264	7	POLG, POLG2, POLRMT, RRM2B, TWNK, RRM1, DNA2	11	128	92.90	1.933e-13	1.002e-10
proton motive force-driven mitochondrial ATP synthesis	GO:0042776	11	ATP6, ATP8, ND1, ND2, ND3, ND4, ND4L, ND5, NDUFS2, ND6, NDUFS1	64	128	25.09	5.501e-13	2.585e-10
mitochondrial respiratory chain complex I assembly	GO:0032981	9	ND1, ND2, ND4, ND5, FOXRED1, NDUFS2, ND6, NDUFAF5, NDUFS1	40	128	32.85	5.707e-12	2.209e-9
proton transmembrane transport	GO:1902600	14	SLC25A4, ATP6, ATP8, COX1, COX2, COX3, ND1, ND2, ND3, ND4L, SLC25A22, NDUFS2	181	128	11.29	2.565e-11	8.481e-9
mitochondrial electron transport, NADH to ubiquinone	GO:0006120	9	ND1, ND2, ND3, ND4, ND4L, ND5, NDUFS2, ND6, NDUFS1	47	128	27.96	2.732e-11	8.955e-9
aerobic respiration	GO:0009060	10	COX1, ND1, ND2, ND3, ND4, ND4L, ND5, NDUFS2, ND6, NDUFS1	68	128	21.47	3.308e-11	1.062e-8
ATP synthesis coupled electron transport	GO:0042773	5	COX2, ND4, ND4L, ND5, NDUFS1	7	128	104.28	2.895e-10	7.288e-8
visual perception	GO:0007601	11	LRAT, RDH12, RP1, RPE65, RPGRIP1, BEST1, EYS, PDE6B, RHO, USH2A, BBS10	215	128	7.47	2.716e-7	2.836e-5
cilium assembly	GO:0060271	11	FLNA, USP9X, CIBAR1, AHI1, BBIP1, CEP290, CFAP20, IFT122, IFT88, INPP5E, KIAA0586	237	128	6.78	7.159e-7	6.376e-5
response to ethanol	GO:0045471	8	SOD1, COX2, ND4, CYTB, GRIN2B, TNF, CSF3, NTRK3	110	128	10.62	8.876e-7	7.582e-5
response to copper ion	GO:0046688	4	IL1A, SOD1, COX1, CYTB	12	128	48.66	9.963e-7	8.327e-5
electron transport coupled proton transport	GO:0015990	3	ND4, ND5, CYTB	4	128	109.49	1.249e-6	1.003e-4
retina development in camera-type eye	GO:0060041	7	RRM1, RP1, RPGRIP1, PDE6B, RHO, SCAPER, BBS10	85	128	12.02	1.900e-6	1.407e-4
cell projection organization	GO:0030030	10	FLNA, PRICKLE3, RP1, CIBAR1, AHI1, BBIP1, CEP290, IFT122, IFT88, KIAA0586	214	128	6.82	2.201e-6	1.585e-4
response to hypoxia	GO:0001666	9	SOD2, COX1, COX2, ND1, ND2, ND4, ND5, CYTB, TNF	176	128	7.47	3.466e-6	2.286e-4