

GeDiPNet Cluster 29 -- 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: 2026-10-11 03:23:12. · Rows: 15 · Generated: 2026-10-11 12:38:50

GO Term	GO ID	Overlap Genes	Overlap Gene Names	Term Gene Count	Cluster Gene Count	Fold Enrichment	P-value	FDR Q-value
positive regulation of gene expression	GO:0010628	70	CTSH, DTNBP1, PTPN22, SMAD3, TICAM1, TLR3, TP53, VDR, ZBTB7B, SMO, ATM, ATF2	504	1021	2.54	5.138e-13	2.495e-10
response to lipopolysaccharide	GO:0032496	33	CASP8, FOXP1, GPX4, PTPN22, RAC1, TICAM1, DIO2, DUSP10, EDN1, GJB6, LITAF, SPON2	161	1021	3.75	3.503e-11	1.139e-8
positive regulation of miRNA transcription	GO:1902895	18	SMAD3, TERT, TP53, IL6, JUN, MYCN, TGFB2, EGFR, NOTCH2, IL10, TNF, NGFR	56	1021	5.88	4.781e-10	1.175e-7
negative regulation of transcription by RNA polymerase II	GO:0000122	101	BACH2, CBFA2T2, CUX1, DUSP22, FOXP1, JARID2, JAZF1, JDP2, MAFF, OVOL1, RALY, SLA2	1002	1021	1.84	1.371e-9	2.993e-7
positive regulation of cell population proliferation	GO:0008284	64	CEP43, KRT6A, TSPYL5, SMO, EDN1, IGF2BP1, IL6, MARCKSL1, SOX4, TBX1, TGFB2, EGFR	532	1021	2.20	2.320e-9	4.736e-7
antigen processing and presentation	GO:0019882	16	CTSH, CTSS, HLA-B, HLA-C, HLA-DPA1, HLA-DQA1, HLA-DQB1, HLA-DRA, HLA-DRB1, RAB5B, HLA-DOB, HLA-DQB2	48	1021	6.10	2.418e-9	4.911e-7
positive regulation of transcription by RNA polymerase II	GO:0045944	115	AHR, BCL2L12, CD200, GRHL1, IKZF4, IRF4, MAFF, MC1R, PIK3R1, PPARGC1B, SBNO2, SMAD3	1208	1021	1.74	2.659e-9	5.335e-7
liver development	GO:0001889	21	JARID2, SMAD3, ARID5B, ATF2, JUN, PIK3CA, NOTCH2, UGT1A10, UGT1A7, UGT1A8, UGT1A9, SOD2	87	1021	4.42	6.037e-9	1.094e-6
melanin biosynthetic process	GO:0042438	9	ASIP, MC1R, OCA2, SLC45A2, TYR, MFSD12, SLC24A5, TYRP1, PMEL	14	1021	11.77	6.544e-9	1.176e-6
regulation of gene expression	GO:0010468	52	AHR, FOXP1, JARID2, MC1R, ZBTB7B, SMO, ATM, BAP1, GLI2, PIK3CA, ROCK1, CDH1	402	1021	2.37	6.648e-9	1.190e-6
negative regulation of apoptotic process	GO:0043066	62	BCL2L12, CFL1, DSTYK, PIK3R1, PRDX5, SMAD3, TERT, TP53, RASA1, SMO, ERBB2, IL6	524	1021	2.17	7.873e-9	1.379e-6
cell population proliferation	GO:0008283	39	BRCA2, JARID2, KANK1, OCA2, SMAD3, TP53, TYR, SMO, BAP1, CAV1, ERBB2, JUN	263	1021	2.71	1.280e-8	2.114e-6
antigen processing and presentation of peptide or polysaccharide antigen via MHC class II	GO:0002504	9	HLA-DPA1, HLA-DQA1, HLA-DQB1, HLA-DRA, HLA-DRB1, HLA-DOB, HLA-DQB2, HLA-DOA, HLA-DRB5	15	1021	10.98	1.557e-8	2.513e-6
positive regulation of nitric oxide biosynthetic process	GO:0045429	14	SMAD3, TICAM1, EDN1, IL1B, PTGS2, PTX3, SOD2, TNF, CLU, IFNG, KLRK1, TLR4	42	1021	6.10	2.426e-8	3.695e-6
peptide antigen assembly with MHC class II protein complex	GO:0002503	9	HLA-DPA1, HLA-DQA1, HLA-DQB1, HLA-DRA, HLA-DRB1, HLA-DOB, HLA-DQB2, HLA-DOA, HLA-DRB5	16	1021	10.30	3.385e-8	4.866e-6