

GeDiPNet Cluster 41 -- 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: 2026-10-07 03:23:06. · Rows: 15 · Generated: 2026-10-07 17:13:31

GO Term	GO ID	Overlap Genes	Overlap Gene Names	Term Gene Count	Cluster Gene Count	Fold Enrichment	P-value	FDR Q-value
heart development	GO:0007507	75	BMP2, TBX5, TGFB2, GATA4, NKX2-5, CITED2, BMP4, ISL1, DYNC2H1, ECE1, EDN1, EDNRA	273	514	9.99	9.015e-54	2.252e-49
positive regulation of transcription by RNA polymerase II	GO:0045944	130	BMP2, TBX5, GATA4, TBX20, NKX2-5, CITED2, GATA6, BMP4, CHD7, ISL1, SMARCA4, TBX2	1208	514	3.91	1.914e-43	2.910e-39
skeletal system development	GO:0001501	47	BMP2, TGFB2, TLL1, BMP4, CHD7, COL11A2, COL2A1, EDN1, GDF3, GNA11, UFD1, ZIC3	151	514	11.32	1.324e-36	1.130e-32
positive regulation of DNA-templated transcription	GO:0045893	93	BMP2, TBX5, GATA4, TBX20, NKX2-5, CITED2, GATA6, ACTL6A, BMP4, PQBP1, SMARCA4, TBX2	778	514	4.35	3.648e-34	2.604e-30
negative regulation of transcription by RNA polymerase II	GO:0000122	105	BMP2, FOXP1, GATA4, TBX20, NKX2-5, CITED2, GATA6, BMP4, HDAC8, ISL1, SMARCA4, TBX2	1002	514	3.81	1.306e-33	8.961e-30
outflow tract morphogenesis	GO:0003151	31	TGFB2, TBX20, NKX2-5, CITED2, BMP4, ISL1, TBX2, EYA1, HAND2, HIF1A, NIPBL, NOTCH1	63	514	17.89	6.933e-32	4.181e-28
heart morphogenesis	GO:0003007	28	BMP2, TGFB2, NKX2-5, BMP4, CHD7, ISL1, SOS1, TBX2, COL2A1, HAND2, NIPBL, TBX1	61	514	16.69	8.034e-28	3.603e-24
outflow tract septum morphogenesis	GO:0003148	21	ROBO1, TGFB2, TBX20, NKX2-5, GATA6, BMP4, ISL1, TBX2, SMAD6, TBX1, BMPR1A, ACVR1	28	514	27.27	1.119e-27	4.831e-24
regulation of DNA-templated transcription	GO:0006355	117	BMP2, FOXP1, TBX5, GATA4, TBX20, NKX2-5, CITED2, GATA6, ACTL6A, CHD7, ISL1, MN1	1454	514	2.93	6.183e-27	2.458e-23
lung development	GO:0030324	34	TBX5, BMP4, NOTCH1, PITX2, STRA6, VEGFA, BMPR1A, FGF10, ZIC3, SMAD2, BMPR2, FGF8	108	514	11.45	6.119e-27	2.458e-23
regulation of transcription by RNA polymerase II	GO:0006357	120	FOXP1, TBX5, GATA4, TBX20, NKX2-5, CITED2, GATA6, ACTL6A, SMARCA4, SOS1, TBX2, AHR	1602	514	2.72	6.854e-25	2.141e-21
blood vessel development	GO:0001568	26	TGFB2, CITED2, BMP4, CHD7, AHR, HIF1A, STRA6, TBX1, VEGFA, BMPR2, COL1A1, COL1A2	70	514	13.50	5.176e-23	1.284e-19
roof of mouth development	GO:0060021	26	CHD7, SOS1, TBX2, COL11A2, COL2A1, HAND2, WDPCP, BMPR1A, OSR1, PDGFRA, SNAI1, TCF21	70	514	13.50	5.176e-23	1.284e-19
cell differentiation	GO:0030154	91	ROBO1, BMP2, GATA4, TLL1, NKX2-5, CITED2, GATA6, BMP4, CYFIP1, HUWE1, ISL1, CAV3	1051	514	3.15	5.851e-23	1.431e-19
positive regulation of gene expression	GO:0010628	60	ROBO1, BMP2, TGFB2, ACTC1, NKX2-5, CITED2, BMP4, RPL5, ETV2, HAND2, HIF1A, IRX1	504	514	4.33	5.745e-22	1.225e-18