

GeDiPNet Cluster 215 -- 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 02:36:35

GO Term	GO ID	Overlap Genes	Overlap Gene Names	Term Gene Count	Cluster Gene Count	Fold Enrichment	P-value	FDR Q-value
chemical synaptic transmission	GO:0007268	51	GRIN2A, MECP2, SNAP25, APBA2, BSN, CACNB4, CHRM1, CHRM2, CHRM3, CHRNA7, CRH, DLG3	236	373	10.83	4.970e-38	4.566e-34
monoatomic ion transport	GO:0006811	72	CACNA1H, GRIN2A, KCNT1, SCN2A, SCN8A, ATP1A2, ATP1A3, CACNA1C, CACNB4, CHRNA1, CHRNA7, CLCN2	667	373	5.41	1.232e-32	7.819e-29
monoatomic ion transmembrane transport	GO:0034220	52	CACNA1H, GRIN2A, KCNT1, SCN2A, SCN8A, CACNA1C, CACNB4, CHRNA1, CHRNA7, CLCN2, GABRA1, GABRA2	404	373	6.45	3.367e-27	1.351e-23
regulation of postsynaptic membrane potential	GO:0060078	20	GRIN2A, CHRM1, CHRNA1, GABRA1, GABRA2, GABRB2, GABRD, GABRG2, GRIA1, GRM1, HCN1, CHRNB2	59	373	16.98	8.338e-20	1.282e-16
response to nicotine	GO:0035094	16	ATP1A2, CHRNA1, CHRNA7, FOSB, GPX1, ND4, OPRD1, CHRNB2, ABAT, CHRNA3, CHRNA4, CHRNA5	40	373	20.04	1.874e-17	1.959e-14
excitatory postsynaptic potential	GO:0060079	19	GRIN2A, MECP2, AKT1, CHRNA1, CHRNA7, GRIN2B, MEF2C, P2RX2, P2RX4, CHRNB2, ADORA2A, CHRNA3	69	373	13.80	5.958e-17	5.671e-14
response to hypoxia	GO:0001666	27	MECP2, ABCB1, ABCC9, CHRNA7, CYTB, ND2, ND4, NR4A2, P2RX2, SLC2A1, TGFB1, KCNMA1	176	373	7.69	1.595e-16	1.408e-13
response to xenobiotic stimulus	GO:0009410	31	GRIN2A, ABCB1, ABCC9, ADRA1A, BCHE, CRH, CYTB, FOS, FOSB, GABRB3, GPX1, GRIA1	248	373	6.26	3.370e-16	2.821e-13
potassium ion transport	GO:0006813	24	KCNT1, ABCC9, ATP1A2, ATP1A3, HCN1, KCNAB2, KCNB1, KCNH1, KCNH7, KCNQ2, SLC12A2, SLC12A5	152	373	7.91	4.099e-15	2.773e-12
regulation of membrane potential	GO:0042391	19	CACNA1H, GRIN2A, ABCC9, CACNB4, CHRNA1, CHRNA7, GRIN2B, GRM1, HCN1, KCNH1, KCNH7, SCN1A	85	373	11.20	4.097e-15	2.773e-12
nervous system development	GO:0007399	45	SCN2A, ACHE, AKT1, APBA2, ARID1B, BDNF, CELSR1, CHRM1, CHRM2, CHRM3, DLG3, DYRK1A	631	373	3.57	1.201e-13	6.433e-11
presynaptic modulation of chemical synaptic transmission	GO:0099171	13	ADRA2A, APBA2, CHRM2, CHRNA1, NRXN2, ADORA2A, CHRNA3, CHRNA4, CHRNA5, DRD1, DRD2, NGFR	37	373	17.60	1.499e-13	7.880e-11
response to ethanol	GO:0045471	19	GRIN2A, CRH, CYTB, FOS, FOSB, GRIA1, GRIN2B, ND4, OPRD1, TGFB1, CHRNB2, ABAT	110	373	8.65	5.902e-13	2.759e-10
synaptic transmission, cholinergic	GO:0007271	11	CHRM3, CHRNA1, CHRNA7, CHRNB2, ADORA2A, APOE, CHRNA3, CHRNA4, CHRNA5, CHRNB4, CHRNA2	25	373	22.04	6.007e-13	2.800e-10
locomotory behavior	GO:0007626	18	SNAP25, APBA2, GNAO1, GRM1, NPY2R, SLC1A1, DDHD2, CHRNB2, ABAT, ADORA2A, ATP7A, CHRNA3	99	373	9.11	9.697e-13	4.385e-10