

## GeDiPNet Cluster 582 -- 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: 2026-10-20 03:23:14. · Rows: 15 · Generated: 2026-10-19 23:18:40

| GO Term                                                                                                                         | GO ID      | Overlap Genes | Overlap Gene Names                | Term Gene Count | Cluster Gene Count | Fold Enrichment | P-value  | FDR Q-value |
|---------------------------------------------------------------------------------------------------------------------------------|------------|---------------|-----------------------------------|-----------------|--------------------|-----------------|----------|-------------|
| negative regulation of synaptic transmission, glutamatergic                                                                     | GO:0051967 | 3             | DRD2, DRD3, HTR2A                 | 10              | 22                 | 254.82          | 1.690e-7 | 1.969e-5    |
| positive regulation of DNA biosynthetic process                                                                                 | GO:2000573 | 3             | PDGFB, PDGFRB, HTR2A              | 12              | 22                 | 212.35          | 3.094e-7 | 3.270e-5    |
| regulation of dopamine secretion                                                                                                | GO:0014059 | 3             | DRD2, DRD3, HTR2A                 | 15              | 22                 | 169.88          | 6.385e-7 | 5.956e-5    |
| behavioral response to cocaine                                                                                                  | GO:0048148 | 3             | DRD2, DRD3, HTR2A                 | 17              | 22                 | 149.90          | 9.528e-7 | 8.265e-5    |
| regulation of amine transport                                                                                                   | GO:0051952 | 2             | DRD2, DRD3                        | 2               | 22                 | 849.41          | 1.323e-6 | 1.082e-4    |
| positive regulation of ERK1 and ERK2 cascade                                                                                    | GO:0070374 | 5             | PDGFB, PDGFRB, DRD2, HTR2A, PDE8B | 201             | 22                 | 21.13           | 3.108e-6 | 2.158e-4    |
| positive regulation of metanephric mesenchymal cell migration by platelet-derived growth factor receptor-beta signaling pathway | GO:0035793 | 2             | PDGFB, PDGFRB                     | 3               | 22                 | 566.27          | 3.966e-6 | 2.629e-4    |
| acid secretion                                                                                                                  | GO:0046717 | 2             | DRD2, DRD3                        | 3               | 22                 | 566.27          | 3.966e-6 | 2.629e-4    |
| positive regulation of mitotic nuclear division                                                                                 | GO:0045840 | 3             | PDGFB, PDGFRB, DRD3               | 29              | 22                 | 87.87           | 5.073e-6 | 3.210e-4    |
| smooth muscle adaptation                                                                                                        | GO:0014805 | 2             | PDGFB, PDGFRB                     | 4               | 22                 | 424.70          | 7.927e-6 | 4.549e-4    |
| regulation of secretion by cell                                                                                                 | GO:1903530 | 2             | DRD2, DRD3                        | 4               | 22                 | 424.70          | 7.927e-6 | 4.549e-4    |
| response to histamine                                                                                                           | GO:0034776 | 2             | DRD2, DRD3                        | 4               | 22                 | 424.70          | 7.927e-6 | 4.549e-4    |
| response to cocaine                                                                                                             | GO:0042220 | 3             | DRD2, DRD3, HTR2A                 | 35              | 22                 | 72.81           | 9.045e-6 | 5.030e-4    |
| regulation of dopamine uptake involved in synaptic transmission                                                                 | GO:0051584 | 2             | DRD2, DRD3                        | 5               | 22                 | 339.76          | 1.320e-5 | 6.742e-4    |
| adenylate cyclase-inhibiting dopamine receptor signaling pathway                                                                | GO:0007195 | 2             | DRD2, DRD3                        | 5               | 22                 | 339.76          | 1.320e-5 | 6.742e-4    |