

## GeDiPNet Cluster 137 -- Enriched Pathways

Pathway enrichment: KEGG + Reactome, upper-tail hypergeometric test, Benjamini-Hochberg FDR-corrected. Fold enrichment = (overlap / cluster gene count) / (pathway gene count / universe size). Top 15 pathways per cluster by q-value. See [scripts/build\\_cluster\\_enrichment.php](scripts/build_cluster_enrichment.php) on [gedipnet.bicnirrh.res.in](http://gedipnet.bicnirrh.res.in). Data as of: 2026-10-09 03:30:08. · Rows: 15 · Generated: 2026-10-09 12:48:32

| Pathway                                              | Source | Overlap Genes | Overlap Gene Names                                                                     | Pathway Gene Count | Cluster Gene Count | Fold Enrichment | P-value   | FDR Q-value |
|------------------------------------------------------|--------|---------------|----------------------------------------------------------------------------------------|--------------------|--------------------|-----------------|-----------|-------------|
| Pathways in cancer                                   | KEGG   | 119           | ALK, APAF1, BIRC5, BIRC7, DAPK1, ELOC, EPAS1, ERBB2, GSTM1, GSTP1, GSTT1, IFNA2        | 533                | 717                | 3.74            | 1.848e-38 | 1.079e-34   |
| ABC transporters                                     | KEGG   | 30            | ABCC12, ABCA1, ABCA10, ABCA12, ABCA13, ABCA3, ABCA4, ABCA5, ABCA6, ABCA8, ABCA9, ABCB1 | 45                 | 717                | 11.17           | 1.561e-26 | 2.937e-23   |
| Colorectal cancer                                    | KEGG   | 36            | BIRC5, MTOR, PIK3CA, TP53, APC, AXIN2, BAK1, BAX, BCL2, CCND1, CDKN1A, CTNNB1          | 87                 | 717                | 6.93            | 7.422e-22 | 7.105e-19   |
| Hepatocellular carcinoma                             | KEGG   | 49            | GSTM1, GSTP1, GSTT1, KEAP1, MET, MTOR, PBRM1, PIK3CA, PTEN, TP53, APC, AXIN2           | 170                | 717                | 4.83            | 3.442e-21 | 2.961e-18   |
| Bladder cancer                                       | KEGG   | 24            | DAPK1, ERBB2, TP53, VEGFA, CCND1, CDKN1A, EGFR, KRAS, MMP9, MYC, SRC, TYMP             | 41                 | 717                | 9.81            | 1.673e-19 | 1.146e-16   |
| Gastric cancer                                       | KEGG   | 41            | ERBB2, MET, MTOR, PIK3CA, TP53, APC, AXIN2, BAK1, BAX, BCL2, CCND1, CDKN1A             | 150                | 717                | 4.58            | 5.248e-17 | 2.339e-14   |
| Platinum drug resistance                             | KEGG   | 29            | APAF1, BIRC5, ERBB2, GSTM1, GSTP1, GSTT1, PIK3CA, TP53, ATP7A, BAK1, BAX, BCL2         | 75                 | 717                | 6.48            | 6.840e-17 | 2.965e-14   |
| Pancreatic cancer                                    | KEGG   | 29            | ERBB2, MTOR, PIK3CA, RELA, TP53, VEGFA, BAK1, BAX, CCND1, CDKN1A, EGFR, KRAS           | 77                 | 717                | 6.31            | 1.583e-16 | 6.359e-14   |
| Chronic myeloid leukemia                             | KEGG   | 29            | PIK3CA, RELA, TP53, BAK1, BAX, CCND1, CDKN1A, KRAS, MECOM, MYC, NFKB1, TGFB2           | 77                 | 717                | 6.31            | 1.583e-16 | 6.359e-14   |
| AGE-RAGE signaling pathway in diabetic complications | KEGG   | 33            | IL6, PIK3CA, RELA, VEGFA, BAX, BCL2, CCND1, ICAM1, IL1B, JUN, KRAS, NFKB1              | 101                | 717                | 5.47            | 1.808e-16 | 7.165e-14   |
| HIF-1 signaling pathway                              | KEGG   | 34            | ELOC, EPAS1, ERBB2, FLT1, IL6, IL6R, LDHB, MTOR, PDHB, PGK1, PIK3CA, RELA              | 110                | 717                | 5.18            | 4.269e-16 | 1.563e-13   |
| Endometrial cancer                                   | KEGG   | 25            | ERBB2, PIK3CA, PTEN, TP53, APC, AXIN2, BAK1, BAX, CCND1, CDKN1A, CTNNB1, EGFR          | 59                 | 717                | 7.10            | 7.318e-16 | 2.562e-13   |
| Hepatitis B                                          | KEGG   | 41            | APAF1, BIRC5, IFNA2, IL6, PIK3CA, RELA, TP53, BAX, BCL2, CDKN1A, JUN, KRAS             | 163                | 717                | 4.21            | 1.283e-15 | 4.289e-13   |
| Human cytomegalovirus infection                      | KEGG   | 49            | AKAP13, IFNA2, IL6, IL6R, MTOR, PIK3CA, PTGS2, RELA, TP53, TSC1, VEGFA, GNG7           | 226                | 717                | 3.63            | 1.300e-15 | 4.331e-13   |
| Thyroid cancer                                       | KEGG   | 20            | TP53, BAK1, BAX, CCND1, CDKN1A, CTNNB1, KRAS, LEF1, MYC, PPARG, TCF7L2, TPM3           | 37                 | 717                | 9.05            | 1.554e-15 | 5.118e-13   |