

## GeDiPNet Cluster 470 -- 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: 2026-10-20 03:30:09. · Rows: 15 · Generated: 2026-10-20 00:03:19

| Pathway                                    | Source   | Overlap Genes | Overlap Gene Names     | Pathway Gene Count | Cluster Gene Count | Fold Enrichment | P-value  | FDR Q-value |
|--------------------------------------------|----------|---------------|------------------------|--------------------|--------------------|-----------------|----------|-------------|
| Cytokine-cytokine receptor interaction     | KEGG     | 3             | IL17RC, IL23R, IL12RB2 | 298                | 4                  | 30.23           | 5.939e-5 | 1.251e-3    |
| Inflammatory bowel disease                 | KEGG     | 2             | IL23R, IL12RB2         | 66                 | 4                  | 90.98           | 1.772e-4 | 2.984e-3    |
| JAK-STAT signaling pathway                 | KEGG     | 2             | IL23R, IL12RB2         | 168                | 4                  | 35.74           | 1.146e-3 | 1.257e-2    |
| Interleukin-17 signaling                   | Reactome | 1             | IL17RC                 | 8                  | 4                  | 375.31          | 2.662e-3 | 2.343e-2    |
| Interleukin-23 signaling                   | Reactome | 1             | IL23R                  | 9                  | 4                  | 333.61          | 2.995e-3 | 2.538e-2    |
| Interleukin-12 signaling                   | Reactome | 1             | IL12RB2                | 10                 | 4                  | 300.25          | 3.327e-3 | 2.738e-2    |
| Interleukin-35 Signalling                  | Reactome | 1             | IL12RB2                | 12                 | 4                  | 250.21          | 3.991e-3 | 3.122e-2    |
| Pathways in cancer                         | KEGG     | 2             | IL23R, IL12RB2         | 533                | 4                  | 11.27           | 1.111e-2 | 6.071e-2    |
| CLEC7A (Dectin-1) signaling                | Reactome | 1             | CARD9                  | 79                 | 4                  | 38.01           | 2.606e-2 | 9.987e-2    |
| Th1 and Th2 cell differentiation           | KEGG     | 1             | IL12RB2                | 93                 | 4                  | 32.28           | 3.062e-2 | 1.097e-1    |
| IL-17 signaling pathway                    | KEGG     | 1             | IL17RC                 | 94                 | 4                  | 31.94           | 3.095e-2 | 1.102e-1    |
| C-type lectin receptor signaling pathway   | KEGG     | 1             | CARD9                  | 105                | 4                  | 28.60           | 3.452e-2 | 1.169e-1    |
| Interleukin-4 and Interleukin-13 signaling | Reactome | 1             | IL23R                  | 108                | 4                  | 27.80           | 3.549e-2 | 1.188e-1    |
| Th17 cell differentiation                  | KEGG     | 1             | IL23R                  | 109                | 4                  | 27.55           | 3.582e-2 | 1.195e-1    |
| Alcoholic liver disease                    | KEGG     | 1             | IL17RC                 | 144                | 4                  | 20.85           | 4.711e-2 | 1.399e-1    |