|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| GSEA results pathway | Size | EnrichmentScore | FDRq-value | Rank Max | tags | list | signal |
| KEGG ASTHMA | 15 | 0.823 | 0 | 1492 | 93% | 11% | 105% |
| KEGG AUTOIMMUNE THYROID DISEASE | 27 | 0.785 | 0 | 2405 | 96% | 18% | 117% |
| KEGG ALLOGRAFT REJECTION | 26 | 0.783 | 0 | 2405 | 96% | 18% | 117% |
| KEGG GRAFT VERSUS HOST DISEASE | 26 | 0.783 | 0 | 2405 | 96% | 18% | 117% |
| REACTOME PD1 SIGNALING | 17 | 0.777 | 0 | 1426 | 88% | 11% | 99% |
| REACTOME PHOSPHORYLATION OF CD3 AND TCR ZETA CHAINS | 15 | 0.724 | 0 | 1030 | 80% | 8% | 87% |
| KEGG TYPE I DIABETES MELLITUS | 30 | 0.688 | 0 | 2405 | 87% | 18% | 105% |
| BIOCARTA CTLA4 PATHWAY | 17 | 0.633 | 0 | 985 | 71% | 7% | 76% |
| REACTOME COMPLEMENT CASCADE | 17 | 0.558 | 4.47E-04 | 3563 | 82% | 27% | 112% |
| KEGG INTESTINAL IMMUNE NETWORK FOR IGA PRODUCTION | 32 | 0.549 | 5.07E-04 | 1030 | 63% | 8% | 68% |
| REACTOME IMMUNOREGULATORY INTERACTIONS BETWEEN A LYMPHOID AND A NON LYMPHOID CELL | 48 | 0.518 | 0.0012 | 2016 | 67% | 15% | 78% |
| BIOCARTA IL12 PATHWAY | 18 | 0.503 | 0.0018 | 2193 | 67% | 16% | 80% |
| PID IL12 STAT4PATHWAY | 28 | 0.477 | 0.0042 | 3666 | 75% | 27% | 103% |
| PID INTEGRIN CS PATHWAY | 22 | 0.467 | 0.0053 | 4705 | 82% | 35% | 126% |
| BIOCARTA NKT PATHWAY | 20 | 0.467 | 0.0049 | 5135 | 85% | 38% | 138% |
| REACTOME DOWNSTREAM TCR SIGNALING | 33 | 0.461 | 0.0052 | 3975 | 76% | 30% | 108% |
| REACTOME GENERATION OF SECOND MESSENGER MOLECULES | 26 | 0.449 | 0.0073 | 6867 | 96% | 51% | 197% |
| REACTOME INTERFERON GAMMA SIGNALING | 53 | 0.448 | 0.0072 | 5135 | 83% | 38% | 134% |
| PID IL23PATHWAY | 22 | 0.444 | 0.0080 | 3795 | 73% | 28% | 101% |
| KEGG PRIMARY IMMUNODEFICIENCY | 30 | 0.430 | 0.0127 | 4073 | 73% | 30% | 105% |
| BIOCARTA CSK PATHWAY | 20 | 0.427 | 0.0130 | 984 | 50% | 7% | 54% |
| KEGG ANTIGEN PROCESSING AND PRESENTATION | 57 | 0.418 | 0.0158 | 2405 | 60% | 18% | 72% |
| KEGG HEMATOPOIETIC CELL LINEAGE | 61 | 0.417 | 0.0159 | 4537 | 75% | 34% | 114% |
| KEGG COMPLEMENT AND COAGULATION CASCADES | 41 | 0.416 | 0.0154 | 3910 | 71% | 29% | 100% |
| PID IL27PATHWAY | 18 | 0.394 | 0.0316 | 1419 | 50% | 11% | 56% |
| BIOCARTA STATHMIN PATHWAY | 16 | 0.393 | 0.0313 | 5612 | 81% | 42% | 140% |
| KEGG LEISHMANIA INFECTION | 61 | 0.388 | 0.0345 | 2505 | 57% | 19% | 70% |
| BIOCARTA ATM PATHWAY | 19 | 0.382 | 0.0392 | 4747 | 74% | 36% | 114% |
| PID IL12 2PATHWAY | 56 | 0.377 | 0.0435 | 3813 | 66% | 29% | 92% |
| REACTOME CHEMOKINE RECEPTORS BIND CHEMOKINES | 28 | 0.376 | 0.0432 | 1187 | 46% | 9% | 51% |
| REACTOME ENOS ACTIVATION AND REGULATION | 19 | 0.372 | 0.0475 | 3482 | 63% | 26% | 85% |
| Table S1 – Summary of Gene Set Enrichment Analysis (GSEA) results for pathways with FDR < 0.05. |