Supplementary Table S4

Gene set enrichment analysis for *ERVFRD-1* related DEGs.

| ID | setSize | enrichmentScore | NES | pvalue | p.adjust | qvalue | rank | leading\_edge |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| REACTOME\_SCAVENGING\_OF\_HEME\_FROM\_PLASMA | | 69 | -0.88201 | -2.75308 | 1E-10 | 9.97E-09 | 8.33E-09 | 2519 | tags=83%, list=7%, signal=77% |
| REACTOME\_CD22\_MEDIATED\_BCR\_REGULATION | | 61 | -0.89133 | -2.74498 | 1E-10 | 9.97E-09 | 8.33E-09 | 2442 | tags=84%, list=7%, signal=78% |
| GOBP\_HUMORAL\_IMMUNE\_RESPONSE\_MEDIATED\_BY\_CIRCULATING\_IMMUNOGLOBULIN | | 111 | -0.78049 | -2.52415 | 1E-10 | 2E-08 | 1.66E-08 | 4030 | tags=68%, list=11%, signal=60% |
| GOBP\_PHAGOCYTOSIS\_RECOGNITION | | 95 | -0.78468 | -2.50922 | 1E-10 | 2E-08 | 1.66E-08 | 3779 | tags=69%, list=10%, signal=63% |
| GOCC\_IMMUNOGLOBULIN\_COMPLEX | | 155 | -0.86318 | -2.87607 | 1E-10 | 1.59E-08 | 1.4E-08 | 3779 | tags=85%, list=10%, signal=77% |
| GOCC\_IMMUNOGLOBULIN\_COMPLEX\_CIRCULATING | | 68 | -0.87728 | -2.70979 | 1E-10 | 1.59E-08 | 1.4E-08 | 3779 | tags=90%, list=10%, signal=81% |
| GOMF\_IMMUNOGLOBULIN\_RECEPTOR\_BINDING | | 71 | -0.86848 | -2.73876 | 1E-10 | 5.47E-08 | 4.64E-08 | 3779 | tags=85%, list=10%, signal=76% |
| GOMF\_ANTIGEN\_BINDING | | 165 | -0.7747 | -2.59678 | 1E-10 | 5.47E-08 | 4.64E-08 | 3780 | tags=56%, list=10%, signal=51% |

Abbreviations: GSEA, gene set enrichment analysis; BP, biological processes; CC, subcellular localizations; MF, molecular functions.