

**Table S4** KEGG enrichment analysis (  $p$ -value < 0.05 ). 41 KEGG terms are identified using the filter  $p$  < 0.05. The term, the number of DEGs,  $p$ -value, and the enrichment score (ES) are described in the table.

**Table S4 KEGG enrichment analysis (  $p$ -value < 0.05 )**

| ID       | Term                                                          | Number | $p$ -value | ES   |
|----------|---------------------------------------------------------------|--------|------------|------|
| hsa00030 | Pentose phosphate pathway                                     | 5      | 0.04       | 2.57 |
| hsa01522 | Endocrine resistance                                          | 11     | 0.04       | 1.79 |
| hsa03450 | Non-homologous end-joining                                    | 3      | 0.05       | 3.56 |
| hsa04010 | MAPK signaling pathway                                        | 30     | 0.01       | 1.54 |
| hsa04061 | Viral protein interaction with cytokine and cytokine receptor | 12     | 0.02       | 1.89 |
| hsa04062 | Chemokine signaling pathway                                   | 27     | 0.00       | 2.19 |
| hsa04072 | Phospholipase D signaling pathway                             | 16     | 0.03       | 1.68 |
| hsa04210 | Apoptosis                                                     | 16     | 0.01       | 1.83 |
| hsa04216 | Ferroptosis                                                   | 8      | 0.00       | 3.01 |
| hsa04217 | Necroptosis                                                   | 17     | 0.03       | 1.65 |
| hsa04380 | Osteoclast differentiation                                    | 23     | 0.00       | 2.69 |
| hsa04520 | Adherens junction                                             | 11     | 0.04       | 1.82 |
| hsa04540 | Gap junction                                                  | 11     | 0.03       | 1.93 |
| hsa04611 | Platelet activation                                           | 17     | 0.00       | 2.11 |
| hsa04621 | NOD-like receptor signaling pathway                           | 20     | 0.02       | 1.67 |
| hsa04625 | C-type lectin receptor signaling pathway                      | 13     | 0.02       | 1.93 |
| hsa04657 | IL-17 signaling pathway                                       | 15     | 0.00       | 2.46 |
| hsa04659 | Th17 cell differentiation                                     | 12     | 0.04       | 1.75 |
| hsa04662 | B cell receptor signaling pathway                             | 11     | 0.01       | 2.09 |
| hsa04668 | TNF signaling pathway                                         | 19     | 0.00       | 2.57 |

|          |                                                            |    |      |      |
|----------|------------------------------------------------------------|----|------|------|
| hsa04670 | Leukocyte transendothelial migration                       | 15 | 0.01 | 2.01 |
| hsa04915 | Estrogen signaling pathway                                 | 16 | 0.01 | 1.81 |
| hsa04926 | Relaxin signaling pathway                                  | 15 | 0.02 | 1.79 |
| hsa04928 | Parathyroid hormone synthesis, secretion and action        | 14 | 0.01 | 2.04 |
| hsa04935 | Growth hormone synthesis, secretion and action             | 14 | 0.02 | 1.80 |
| hsa05120 | Epithelial cell signaling in Helicobacter pylori infection | 10 | 0.01 | 2.20 |
| hsa05132 | Salmonella infection                                       | 25 | 0.02 | 1.55 |
| hsa05134 | Legionellosis                                              | 8  | 0.03 | 2.20 |
| hsa05135 | Yersinia infection                                         | 16 | 0.01 | 1.81 |
| hsa05140 | Leishmaniasis                                              | 11 | 0.01 | 2.32 |
| hsa05142 | Chagas disease                                             | 13 | 0.01 | 1.99 |
| hsa05146 | Amoebiasis                                                 | 13 | 0.01 | 1.99 |
| hsa05161 | Hepatitis B                                                | 17 | 0.03 | 1.63 |
| hsa05163 | Human cytomegalovirus infection                            | 25 | 0.01 | 1.73 |
| hsa05167 | Kaposi sarcoma-associated herpesvirus infection            | 22 | 0.01 | 1.75 |
| hsa05168 | Herpes simplex virus 1 infection                           | 57 | 0.00 | 1.72 |
| hsa05200 | Pathways in cancer                                         | 50 | 0.00 | 1.46 |
| hsa05202 | Transcriptional misregulation in cancer                    | 20 | 0.02 | 1.61 |
| hsa05205 | Proteoglycans in cancer                                    | 20 | 0.04 | 1.53 |
| hsa05235 | PD-L1 expression and PD-1 checkpoint pathway in cancer     | 11 | 0.03 | 1.91 |
| hsa05417 | Lipid and atherosclerosis                                  | 24 | 0.01 | 1.73 |