Supplementary Table 2. Significant enrichment results of the KEGG pathway by GSEA software

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Phenotype | GS follow link to MSigDB | GSE73638 | | | GSE27651 | | | GSE14001 | | |
| Size | NES | NOM p-val | Size | NES | NOM p-val | Size | NES | NOM p-val |
| HGSOC | T Cell Receptor Signaling Pathway | 104 | 1.90 | 0.000 | - | - | - | - | - | - |
| **Chemokine Signaling Pathway** | 181 | 1.72 | 0.014 | - | - | - | - | - | - |
| Cell Cycle | 116 | 1.72 | 0.012 | - | - | - | - | - | - |
| Natural Killer Cell Mediated Cytotoxicity | 126 | 1.68 | 0.006 | - | - | - | - | - | - |
| **Oocyte Meiosis** | 109 | 1.66 | 0.014 | - | - | - | - | - | - |
| Non Small Cell Lung Cancer | 54 | 1.65 | 0.015 | - | - | - | - | - | - |
| Primary Immunodeficiency | 35 | 1.60 | 0.025 | - | - | - | - | - | - |
| Long Term Depression | 65 | 1.59 | 0.010 | - | - | - | - | - | - |
| Renal Cell Carcinoma | 66 | 1.59 | 0.018 | - | - | - | - | - | - |
| Toll Like Receptor Signaling Pathway | 99 | 1.57 | 0.021 | - | - | - | - | - | - |
| Dna Replication | 35 | 1.57 | 0.036 | - | - | - | - | - | - |
| Cytokine Cytokine Receptor Interaction | 250 | 1.54 | 0.015 | - | - | - | - | - | - |
| Gap Junction | 82 | 1.53 | 0.019 | - | - | - | - | - | - |
| B Cell Receptor Signaling Pathway | 72 | 1.51 | 0.033 | - | - | - | - | - | - |
| Intestinal Immune Network For Iga Production | 46 | 1.51 | 0.049 | - | - | - | - | - | - |
| Glioma | 65 | 1.44 | 0.040 | - | - | - | - | - | - |
| Pancreatic Cancer | 68 | 1.42 | 0.033 | - | - | - | - | - | - |
| Endocytosis | 173 | 1.41 | 0.042 | - | - | - | - | - | - |
| Regulation Of Actin Cytoskeleton | 206 | 1.39 | 0.043 | - | - | - | - | - | - |
|  |  |  |  |  |  |  |  |  |  |  |
| LGSOC | Ribosome | 72 | -1.83 | 0.010 | - | - | - | - | - | - |
| Notch Signaling Pathway | - | - | - | 46 | -1.59 | 0.014 | - | - | - |
| Arachidonic Acid Metabolism | - | - | - | - | - | - | 50 | -1.51 | 0.025 |
| Nitrogen Metabolism | - | - | - | - | - | - | 22 | -1.50 | 0.021 |
| Steroid Hormone Biosynthesis | - | - | - | - | - | - | 41 | -1.49 | 0.037 |
| Linoleic Acid Metabolism | - | - | - | - | - | - | 23 | -1.48 | 0.038 |
| Glycosaminoglycan Degradation | - | - | - | - | - | - | 20 | -1.44 | 0.048 |

Note: HGSOC, high-grade serous ovarian cancer; LGSOC, low-grade serous ovarian cancer; NES, normalized enrichment score; NOM p-val, Nominal p-value.