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.