**Supplementary Table 1.** Functional enrichment analysis of genes positively related to TK1 in cervical cancer

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| --- | --- | --- | --- | --- | --- | --- |
| **ID** | **Category** | **Description** | **GeneRatio** | **p.adjust** | **q-value** | **Count** |
| GO:0006260 | BP | DNA replication | 29/95 | 1.03E-27 | 8.58E-28 | 29 |
| GO:0006261 | BP | DNA-dependent DNA replication | 19/95 | 9.10E-20 | 7.59E-20 | 19 |
| GO:0033260 | BP | nuclear DNA replication | 13/95 | 5.00E-17 | 4.18E-17 | 13 |
| GO:0044786 | BP | cell cycle DNA replication | 13/95 | 6.26E-16 | 5.22E-16 | 13 |
| GO:0032201 | BP | telomere maintenance via semi-conservative replication | 10/95 | 1.87E-14 | 1.56E-14 | 10 |
| GO:0098687 | CC | chromosomal region | 21/98 | 7.99E-15 | 6.20E-15 | 21 |
| GO:0044454 | CC | nuclear chromosome part | 17/98 | 2.83E-08 | 2.20E-08 | 17 |
| GO:0000793 | CC | condensed chromosome | 12/98 | 3.19E-08 | 2.47E-08 | 12 |
| GO:0000775 | CC | chromosome, centromeric region | 11/98 | 1.51E-07 | 1.17E-07 | 11 |
| GO:0000781 | CC | chromosome, telomeric region | 10/98 | 3.15E-07 | 2.45E-07 | 10 |
| GO:0008094 | MF | DNA-dependent ATPase activity | 8/94 | 9.79E-07 | 8.15E-07 | 8 |
| GO:0140097 | MF | catalytic activity, acting on DNA | 9/94 | 1.36E-05 | 1.13E-05 | 9 |
| GO:0043142 | MF | single-stranded DNA-dependent ATPase activity | 4/94 | 2.35E-05 | 1.96E-05 | 4 |
| GO:0003684 | MF | damaged DNA binding | 6/94 | 4.04E-05 | 3.36E-05 | 6 |
| GO:0042623 | MF | ATPase activity, coupled | 9/94 | 0.000111546 | 9.28E-05 | 9 |
| hsa03030 | KEGG | DNA replication | 15/56 | 2.27E-22 | 2.01E-22 | 15 |
| hsa04110 | KEGG | Cell cycle | 14/56 | 2.76E-12 | 2.45E-12 | 14 |
| hsa03430 | KEGG | Mismatch repair | 8/56 | 4.16E-11 | 3.69E-11 | 8 |
| hsa03420 | KEGG | Nucleotide excision repair | 7/56 | 5.79E-07 | 5.13E-07 | 7 |
| hsa03460 | KEGG | Fanconi anemia pathway | 6/56 | 2.95E-05 | 2.62E-05 | 6 |