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# Product datasheet for TP761242

## Thymidine Kinase 2 (TK2) (NM_004614) Human Recombinant Protein

### Product data:

| | |
|---|---|
| **Product Type:** | Recombinant Proteins |
| **Description:** | Purified recombinant protein of Human thymidine kinase 2, mitochondrial (TK2), nuclear gene encoding mitochondrial protein, transcript variant 1, full length, with N-terminal HIS tag, expressed in E. coli, 50ug |
| **Species:** | Human |
| **Expression Host:** | E. coli |
| **Expression cDNA Clone or AA Sequence:** | A DNA sequence encoding human full-length TK2 |
| **Tag:** | N-His |
| **Predicted MW:** | 27.4 kDa |
| **Concentration:** | >0.05 µg/µL as determined by microplate BCA method |
| **Purity:** | > 80% as determined by SDS-PAGE and Coomassie blue staining |
| **Buffer:** | 50 mM Tris-HCl, pH 8.0, 8 M urea |
| **Note:** | For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process. |
| **Storage:** | Store at -80°C. |
| **Stability:** | Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles. |
| **RefSeq:** | NP_004605 |
| **Locus ID:** | 7084 |
| **UniProt ID:** | O00142 |
| **RefSeq Size:** | 3675 |
| **Cytogenetics:** | 16q21 |
| **RefSeq ORF:** | 795 |
| **Synonyms:** | MTDPS2; MTTK; PEOB3; SCA31 |

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**Summary:** This gene encodes a deoxyribonucleoside kinase that specifically phosphorylates thymidine, deoxycytidine, and deoxyuridine. The encoded enzyme localizes to the mitochondria and is required for mitochondrial DNA synthesis. Mutations in this gene are associated with a myopathic form of mitochondrial DNA depletion syndrome. Alternate splicing results in multiple transcript variants encoding distinct isoforms, some of which lack transit peptide, so are not localized to mitochondria. [provided by RefSeq, Dec 2012]

**Protein Families:** Druggable Genome

**Protein Pathways:** Drug metabolism - other enzymes, Metabolic pathways, Pyrimidine metabolism

## Product images: