

Product datasheet for **RC229762L4V**

Thymidine Kinase 2 (TK2) (NM_001172645) Human Tagged ORF Clone Lentiviral Particle

Product data:

| | |
|---------------------------|--|
| Product Type: | Lentiviral Particles |
| Product Name: | Thymidine Kinase 2 (TK2) (NM_001172645) Human Tagged ORF Clone Lentiviral Particle |
| Symbol: | TK2 |
| Synonyms: | MTDPS2; MTTK; PEOB3; SCA31 |
| Mammalian Cell Selection: | Puromycin |
| Vector: | pLenti-C-mGFP-P2A-Puro (PS100093) |
| Tag: | mGFP |
| ACCN: | NM_001172645 |
| ORF Size: | 741 bp |
| ORF Nucleotide Sequence: | The ORF insert of this clone is exactly the same as(RC229762). |
| OTI Disclaimer: | The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info |
| OTI Annotation: | This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene. |
| RefSeq: | NM_001172645.1 , NP_001166116.1 |
| RefSeq ORF: | 744 bp |
| Locus ID: | 7084 |
| Cytogenetics: | 16q21 |
| Protein Families: | Druggable Genome |
| Protein Pathways: | Drug metabolism - other enzymes, Metabolic pathways, Pyrimidine metabolism |
| MW: | 29.4 kDa |



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Gene 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]