

## Product datasheet for RC223312L4V

## OriGene Technologies, Inc.

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## Thymidine Kinase 2 (TK2) (NM 004614) Human Tagged ORF Clone Lentiviral Particle

**Product data:** 

Product Type: Lentiviral Particles

**Product Name:** Thymidine Kinase 2 (TK2) (NM\_004614) Human Tagged ORF Clone Lentiviral Particle

**Symbol:** Thymidine Kinase 2

Synonyms: MTDPS2; MTTK; PEOB3; SCA31

Mammalian Cell

Selection:

Puromycin

**Vector:** pLenti-C-mGFP-P2A-Puro (PS100093)

Tag: mGFP

**ACCN:** NM\_004614

ORF Size: 795 bp

**ORF Nucleotide** 

OTI Disclaimer:

The ORF insert of this clone is exactly the same as(RC223312).

Sequence:

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.

**RefSeg:** NM 004614.3

 RefSeq Size:
 3675 bp

 RefSeq ORF:
 798 bp

 Locus ID:
 7084

 UniProt ID:
 000142

 Cytogenetics:
 16q21

Domains: dNK

**Protein Families:** Druggable Genome





## Thymidine Kinase 2 (TK2) (NM\_004614) Human Tagged ORF Clone Lentiviral Particle – RC223312L4V

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

MW: 31 kDa

**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]