

Product datasheet for RC229747L3V

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Thymidine Kinase 2 (TK2) (NM_001172644) Human Tagged ORF Clone Lentiviral Particle

Product data:

Product Type: Lentiviral Particles

Product Name: Thymidine Kinase 2 (TK2) (NM_001172644) Human Tagged ORF Clone Lentiviral Particle

Symbol: Thymidine Kinase 2

Synonyms: MTDPS2; MTTK; PEOB3; SCA31

Mammalian Cell

Selection:

Puromycin

Vector: pLenti-C-Myc-DDK-P2A-Puro (PS100092)

Tag: Myc-DDK

ACCN: NM_001172644

ORF Size: 720 bp

ORF Nucleotide

The ORF insert of this clone is exactly the same as(RC229747).

Sequence:

Cytogenetics:

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: <u>NM 001172644.1</u>

 RefSeq ORF:
 723 bp

 Locus ID:
 7084

 UniProt ID:
 000142

Protein Families: Druggable Genome

16q21

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

MW: 28.8 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]