

Product datasheet for **RC218280L4V**

Thymidine Kinase 1 (TK1) (NM_003258) Human Tagged ORF Clone Lentiviral Particle

Product data:

Product Type:	Lentiviral Particles
Product Name:	Thymidine Kinase 1 (TK1) (NM_003258) Human Tagged ORF Clone Lentiviral Particle
Symbol:	Thymidine Kinase 1
Synonyms:	TK2
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	NM_003258
ORF Size:	702 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC218280).
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_003258.1
RefSeq Size:	1616 bp
RefSeq ORF:	705 bp
Locus ID:	7083
UniProt ID:	P04183
Cytogenetics:	17q25.3
Domains:	TK
Protein Families:	Druggable Genome, Stem cell - Pluripotency



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

MW: 25.5 kDa

Gene Summary: The protein encoded by this gene is a cytosolic enzyme that catalyzes the addition of a gamma-phosphate group to thymidine. This creates dTMP and is the first step in the biosynthesis of dTTP, which is one component required for DNA replication. The encoded protein, whose levels fluctuate depending on the cell cycle stage, can act as a low activity dimer or a high activity tetramer. High levels of this protein have been used as a biomarker for diagnosing and categorizing many types of cancers. [provided by RefSeq, Oct 2016]