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Product datasheet for RC204814L1V

Thymidylate Synthase (TYMS) (NM_001071) Human Tagged ORF Clone Lentiviral Particle

Product data:

Product Type:	Lentiviral Particles
Product Name:	Thymidylate Synthase (TYMS) (NM_001071) Human Tagged ORF Clone Lentiviral Particle
Symbol:	Thymidylate Synthase
Synonyms:	HST422; TMS; TS
Mammalian Cell Selection:	None
Vector:	pLenti-C-Myc-DDK (PS100064)
Tag:	Myc-DDK
ACCN:	NM_001071
ORF Size:	939 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC204814).
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_001071.1
RefSeq Size:	1536 bp
RefSeq ORF:	942 bp
Locus ID:	7298
UniProt ID:	P04818
Cytogenetics:	18p11.32
Protein Families:	Druggable Genome
Protein Pathways:	Metabolic pathways, One carbon pool by folate, Pyrimidine metabolism

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MW: 35.5 kDa

Gene Summary: Thymidylate synthase catalyzes the methylation of deoxyuridylate to deoxythymidylate using, 10-methylenetetrahydrofolate (methylene-THF) as a cofactor. This function maintains the dTMP (thymidine-5-prime monophosphate) pool critical for DNA replication and repair. The enzyme has been of interest as a target for cancer chemotherapeutic agents. It is considered to be the primary site of action for 5-fluorouracil, 5-fluoro-2-prime-deoxyuridine, and some folate analogs. Expression of this gene and that of a naturally occurring antisense transcript, mitochondrial enolase superfamily member 1 (GeneID:55556), vary inversely when cell-growth progresses from late-log to plateau phase. Polymorphisms in this gene may be associated with etiology of neoplasia, including breast cancer, and response to chemotherapy. [provided by RefSeq, Aug 2017]