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Product datasheet for AR09329PU-N

Thymidylate synthase (TS) (1-313, His-tag) Human Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Thymidylate synthase (TS) (1-313, His-tag) human recombinant protein, 0.1 mg
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	MGSSHHHHHH SSGLVPRGSH MPVAGSELPR RPLPPAAQER DAEPRPPHGE LQYLGQIQHI LRCGVRKDDR TGTGTLSVFG MQARYSLRDE FPLLTTKRVF WKGVLEELLW FIKGSTNAKE LSSKGVKIWD ANGSRDFLDS LGFSTREEGD LGPVYGFQWR HFGAEYRDME SDYSGQGVDQ LQRVIDTIKT NPDDRRIIMC AWNPRDLPLM ALPPCHALCQ FYVVNSELSC QLYQRSGDMG LGVPFNIASY ALLTYMIAHI TGLKPGDFIH TLGDAHIYLN HIEPLKIQLQ REPRPFPKLR ILRKVEKIDD FKAEDFQIEG YNPHPTIKME MAV
Tag:	His-tag
Predicted MW:	37.8 kDa
Concentration:	lot specific
Purity:	>95% SDS - PAGE
Buffer:	Presentation State: Purified State: Liquid purified protein Buffer System: 20 mM Tris-HCl buffer (pH 8.0) containing 1 mM DTT, 10% glycerol
Preparation:	Liquid purified protein
Protein Description:	Recombinant Human Thymidylate synthase protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.
Storage:	Store undiluted at 2-8°C for up to two weeks or (in aliquots) at -20°C or -70°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
RefSeq:	NP_001062
Locus ID:	7298
UniProt ID:	P04818, Q53Y97
Cytogenetics:	18p11.32
Synonyms:	HST422; TMS; TS

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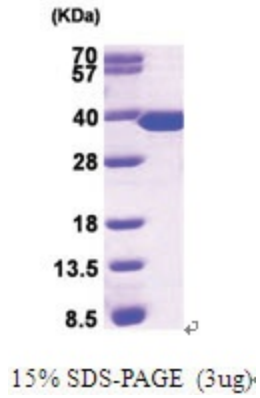
Summary: Thymidylate synthase catalyzes the methylation of deoxyuridylate to deoxythymidylate using, 10-methylenetetrahydrofolate (methylene-THF) as a cofactor. This function maintains the dTMP (thymidine-5-prime monophosphate) pool critical for DNA replication and repair. The enzyme has been of interest 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]

Protein Families: Druggable Genome

Protein Pathways: Metabolic pathways, One carbon pool by folate, Pyrimidine metabolism

Product images:



15% SDS-PAGE (3ug)