

## Product datasheet for SC207009

## OriGene Technologies, Inc.

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## Thymidylate Synthase (TYMS) (NM\_001071) Human 3' UTR Clone

**Product data:** 

**Product Type:** 3' UTR Clones

Product Name: Thymidylate Synthase (TYMS) (NM\_001071) Human 3' UTR Clone

Symbol: Thymidylate Synthase

Synonyms: HST422; TMS; TS

Mammalian Cell

viaitiitialiati Celi

Neomycin

Selection:

Vector:

pMirTarget (PS100062)

ACCN: NM 001071

**Insert Size:** 611 bp

Insert Sequence: >SC207009 3'UTR clone of NM\_001071

The sequence shown below is from the reference sequence of NM\_001071. The complete

sequence of this clone may contain minor differences, such as SNPs.

Blue=Stop Codon Red=Cloning site

GGCAAGTTGGACGCCCGCAAGATCCGCGAGATTCTCATTAAGGCCAAGAAGGGCGGAAAGATCGCCGTG

TAACAATTGGCAGAGCTCAGAATTCAAGCGATCGCC

CTGCCACTTATCTGCTCAGTTCCTTCCTAAAATAGATTAAAGAACTCTCCTTAAGTAAA

**ACGCGT**AAGCGGCCGCGCATCTAGATTCGAAGAAAATGACCGACCAAGCGACGCCCAACCTGCCATCA

CGAGATTTCGATTCCACCGCCGCCTTCTATGAAAGG

Restriction Sites: Sgfl-Mlul

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the sequence identifier above as a

point of reference. Note that the complete sequence of this clone is largely the same as the

reference sequence but may contain minor differences, e.g., single nucleotide

polymorphisms (SNPs).





## Thymidylate Synthase (TYMS) (NM\_001071) Human 3' UTR Clone - SC207009

**Components:** The cDNA clone is shipped in a 2-D bar-coded Matrix tube as 10 ug dried plasmid DNA. The

package also includes 100 pmols of both the corresponding 5' and 3' vector primers in

separate vials.

**RefSeq:** <u>NM 001071.4</u>

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]

Locus ID: 7298 MW: 23.2