

Product datasheet for TR502357

Troduct datasfiect for TR502557

Tyms Mouse shRNA Plasmid (Locus ID 22171)

Product data:

Product Type: shRNA Plasmids

Product Name: Tyms Mouse shRNA Plasmid (Locus ID 22171)

Locus ID: 22171 **Synonyms:** T; Ts

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

Components: Tyms - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

22171). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.

RefSeq: <u>BC020139</u>, <u>NM 021288</u>, <u>NR 033402</u>, <u>NM 021288.1</u>, <u>NM 021288.2</u>, <u>NM 021288.3</u>,

NM 021288.4

UniProt ID: P07607

Summary: This gene encodes an enzyme that catalyzes the methylation of deoxyuridylate to

deoxythymidylate using 5,10-methylenetetrahydrofolate as a cofactor. This function

maintains the thymidine-5-prime monophosphate concentration critical for DNA replication

and repair. The encoded enzyme is a target for cancer chemotherapeutic agents. The

majority of transcripts for this gene lack a 3' UTR (PMID: 3022294, 3444407). The stop codon

in these transcripts is UAA, compared to the UAG found in the genome and longer

transcripts, as the polyA site is located within the stop codon (PMID: 3444407, 2157203). A related pseudogene has been identified on chromosome 10. [provided by RefSeq, Mar 2010]

shRNA Design: These shRNA constructs were designed against multiple splice variants at this gene locus. To

be certain that your variant of interest is targeted, please contact <u>techsupport@origene.com</u>.

If you need a special design or shRNA sequence, please utilize our custom shRNA service.



OriGene Technologies, Inc. 9620 Medical Center Drive, Ste 200

CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com



Performance Guaranteed:

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).