

Product datasheet for TA801565

OriGene Technologies, Inc.

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Thymidylate Synthase (TYMS) Mouse Monoclonal Antibody [Clone ID: OTI5H8]

Product data:

Product Type: Primary Antibodies

Clone Name: OTI5H8
Applications: IHC, WB

Reactivity: WB 1:2000, IHC 1:150 **Reactivity:** Human, Mouse, Rat

Host: Mouse Isotype: IgG2b

Clonality: Monoclonal

Immunogen: Full length human recombinant protein of human TYMS (NP_001062) produced in E.coli.

Formulation: PBS (pH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.

Concentration: 1 mg/ml

Purification: Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Conjugation: Unconjugated

Storage: Store at -20°C as received.

Stability: Stable for 12 months from date of receipt.

Predicted Protein Size: 35.5 kDa

Gene Name: thymidylate synthetase

Database Link: NP 001062

Entrez Gene 22171 MouseEntrez Gene 29261 RatEntrez Gene 7298 Human

P0<u>4818</u>





Background:

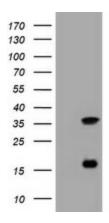
Thymidylate synthase catalyzes the methylation of deoxyuridylate to deoxythymidylate using 5,10-methylenetetrahydrofolate (methylene-THF) as a cofactor. This function maintains the dTMP (thymidine-5-prime monophosphate) pool critical for DNA replication and repair. The enzyme has been of interest as 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 occuring antisense transcript rTSalpha (GeneID:55556) vary inversely when cell-growth progresses from late-log to plateau phase. [provided by RefSeq, Jul 2008]

Synonyms: HST422; TMS; TS

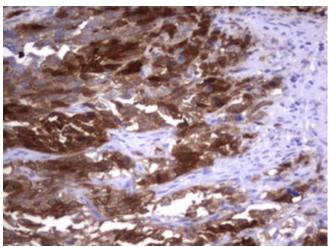
Protein Families: Druggable Genome

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

Product images:

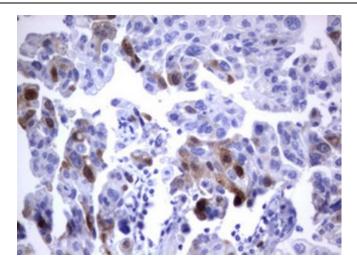


HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY TYMS ([RC204814], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-TYMS. Positive lysates [LY420700] (100ug) and [LC420700] (20ug) can be purchased separately from OriGene.

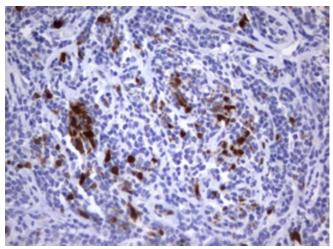


Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human endometrium tissue using anti-TYMS mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

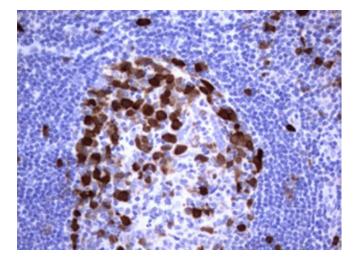




Immunohistochemical staining of paraffinembedded Carcinoma of Human bladder tissue using anti-TYMS mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Immunohistochemical staining of paraffinembedded Human lymphoma tissue using anti-TYMS mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Immunohistochemical staining of paraffinembedded Human tonsil within the normal limits using anti-TYMS mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.