

## Product datasheet for **TA801779M**

### Thymidylate Synthase (TYMS) Mouse Monoclonal Antibody [Clone ID: OTI2C5]

#### Product data:

|                         |   |
|-------------------------|---|
| Product Type:           | Primary Antibodies  |
| Clone Name:             | OTI2C5  |
| Applications:           | WB  |
| Recommended Dilution:   | WB 1:2000   |
| Reactivity:             | Human, Mouse, Rat   |
| Host:                   | Mouse   |
| Isotype:                | IgG2a   |
| 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:          | <a href="#">NP_001062</a><br><a href="#">Entrez Gene 22171 Mouse</a> <a href="#">Entrez Gene 29261 Rat</a> <a href="#">Entrez Gene 7298 Human</a><br><a href="#">P04818</a> |



[View online »](#)

**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 occurring antisense transcript rTSalpha (GenelD:55556) vary inversely when cell-growth progresses from late-log to plateau phase. [provided by RefSeq, Jul 2008]

**Synonyms:**

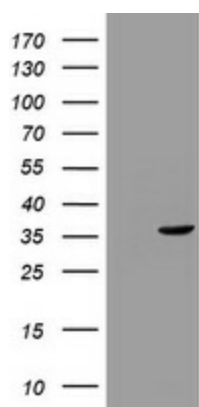
HST422; TMS; TS

**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.