

**Anti-Thymidylate Synthase TYMS Monoclonal Antibody**  
**Catalog # ABO14498****Specification****Anti-Thymidylate Synthase TYMS Monoclonal Antibody - Product Information**

Application	WB, IHC, IF, ICC, IP, FC
Primary Accession	<a href="#">P04818</a>
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse, Monkey
Clonality	Monoclonal
Format	Liquid

**Description**

Anti-Thymidylate Synthase TYMS Monoclonal Antibody . Tested in WB, IHC, ICC/IF, IP, Flow Cytometry applications. This antibody reacts with Human, Monkey, Mouse, Rat.

**Anti-Thymidylate Synthase TYMS Monoclonal Antibody - Additional Information**

**Gene ID** 7298

**Other Names**

Thymidylate synthase, TS, TSase, 2.1.1.45, TYMS ([http://www.genenames.org/cgi-bin/gene\\_symbol\\_report?hgnc\\_id=12441](http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=12441)), TS

**Application Details**

WB 1:500-1:2000<br>IHC 1:50-1:200<br>ICC/IF 1:50-1:200<br>IP 1:50<br>FC 1:50

**Contents**

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

**Immunogen**

A synthesized peptide derived from human Thymidylate Synthase Contributes to the de novo mitochondrial thymidylate biosynthesis pathway.

**Purification**

Affinity-chromatography

**Storage**

**Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.**

**Anti-Thymidylate Synthase TYMS Monoclonal Antibody - Protein Information**

**Name** TYMS ([HGNC:12441](#))

## Synonyms TS

### Function

Catalyzes the reductive methylation of 2'-deoxyuridine 5'- monophosphate (dUMP) to thymidine 5'-monophosphate (dTMP), using the cosubstrate, 5,10- methylenetetrahydrofolate (CH<sub>2</sub>H<sub>4</sub>folate) as a 1- carbon donor and reductant and contributes to the de novo mitochondrial thymidylate biosynthesis pathway.

### Cellular Location

Nucleus. Cytoplasm. Mitochondrion. Mitochondrion matrix. Mitochondrion inner membrane

## Anti-Thymidylate Synthase TYMS Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## Anti-Thymidylate Synthase TYMS Monoclonal Antibody - Images

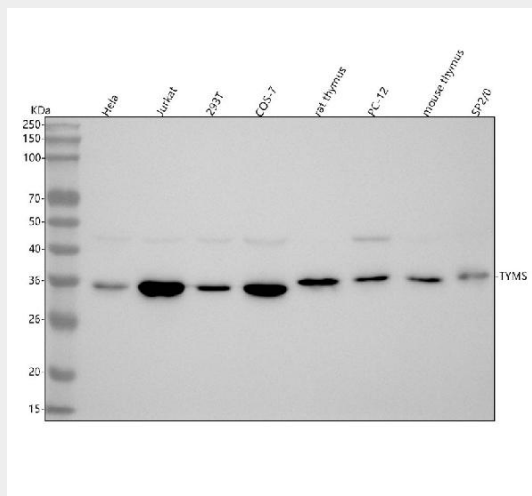


Figure 1. Western blot analysis of TYMS using anti-TYMS antibody (M04320-1).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human Hela whole cell lysates,  
Lane 2: human Jurkat whole cell lysates,  
Lane 3: human 293T whole cell lysates,  
Lane 4: monkey COS-7 whole cell lysates,  
Lane 5: rat thymus tissue lysates,  
Lane 6: rat PC-12 whole cell lysates,  
Lane 7: mouse thymus tissue lysates,  
Lane 8: mouse SP2/0 whole cell lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-TYMS antigen affinity purified monoclonal antibody (Catalog # M04320-1) at 1:500 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:500 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for TYMS at approximately 36 kDa. The expected band size for TYMS is at 36 kDa.