

**TYSY Antibody (C-term)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AW5168**

**Specification**

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**TYSY Antibody (C-term) - Product Information**

Application	WB,E
Primary Accession	<a href="#">P04818</a>
Reactivity	Human
Predicted	Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	H=36;M=35;Rat=35 KDa
Isotype	Rabbit IgG
Antigen Source	HUMAN

**TYSY Antibody (C-term) - Additional Information**

**Gene ID** 7298

**Antigen Region**  
265-294

**Other Names**  
TYMS; TS; Thymidylate synthase

**Dilution**  
WB~~1:1000

**Target/Specificity**  
This TYSY antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 265-294 amino acids from the C-terminal region of human TYSY.

**Format**  
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

**Storage**  
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**  
TYSY Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**TYSY Antibody (C-term) - 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

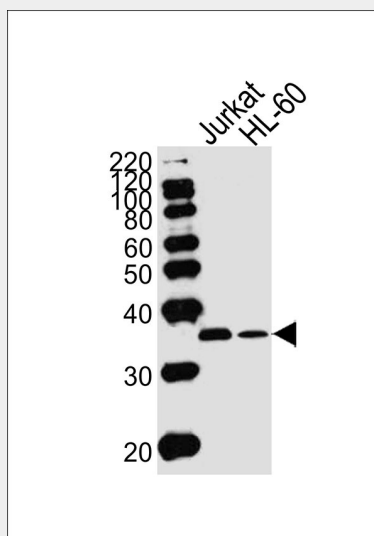
Nucleus. Cytoplasm. Mitochondrion. Mitochondrion matrix. Mitochondrion inner membrane

## TYSY Antibody (C-term) - Protocols

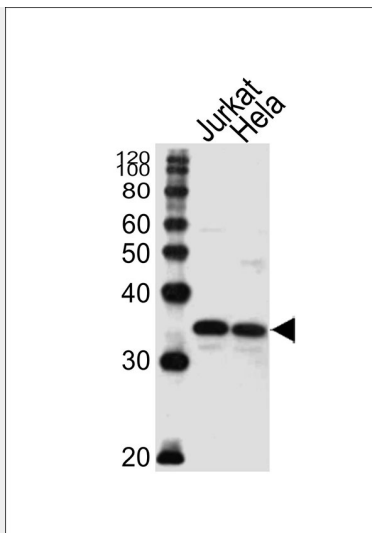
Provided below are standard protocols that you may find useful for product applications.

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

## TYSY Antibody (C-term) - Images



Western blot analysis of lysates from Jurkat, HL-60 cell line (from left to right), using TYSY Antibody (C-term)(Cat. #AW5168). AW5168 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody.



Western blot analysis of lysates from Jurkat, HeLa cell line (from left to right), using TYSY Antibody (C-term) (Cat. #AW5168). AW5168 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L (HRP) at 1:10000 dilution was used as the secondary antibody. Lysates at 20 µg per lane.

#### **TYSY Antibody (C-term) - 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.

#### **TYSY Antibody (C-term) - References**

Ren, D.N., *J Surg Oncol* (2009) Schiffer, C.A., *Biochemistry* 34 (50), 16279-16287 (1995)