

**TYSY Antibody(C-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AX10003**

**Specification**

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

Application	IF, WB, IHC-P, FC,E
Primary Accession	<a href="#">P04818</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	35716
Antigen Region	265-294

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

**Gene ID** 7298

**Other Names**

Thymidylate synthase, TS, TSase, TYMS, TS

**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.

**Dilution**

IF~~1:50  
WB~~1:2000  
IHC-P~~1:500  
FC~~1:50

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**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

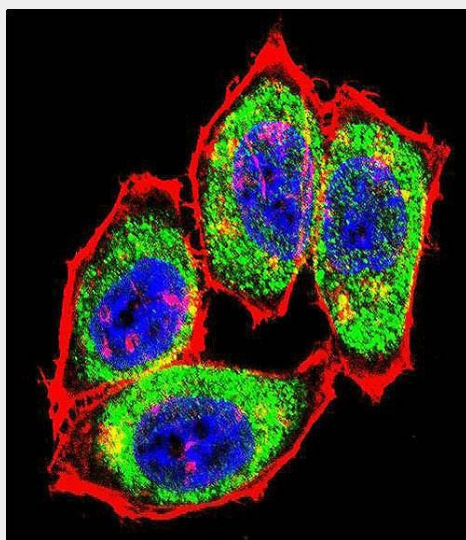
Nucleus. Cytoplasm. Mitochondrion. Mitochondrion matrix. Mitochondrion inner membrane

## TYSY Antibody(C-term) - Protocols

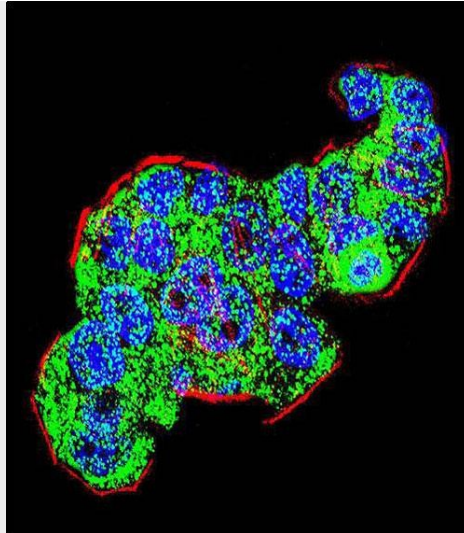
Provided below are standard protocols that you may find useful for product applications.

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

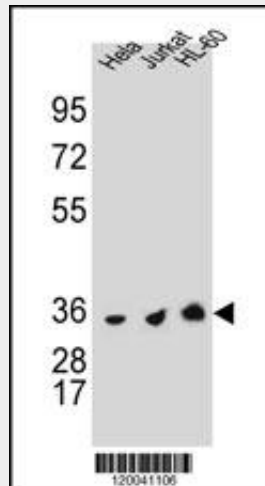
## TYSY Antibody(C-term) - Images



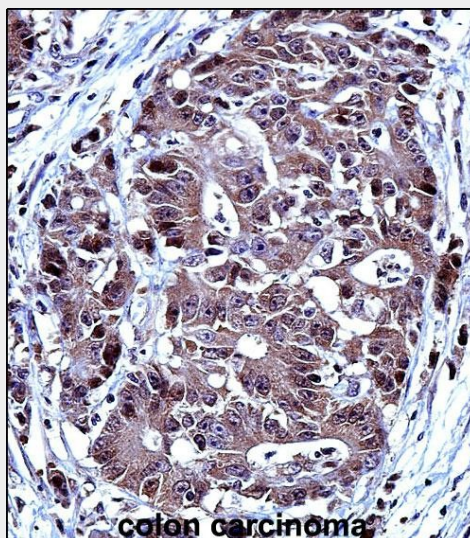
Confocal immunofluorescent analysis of TYSY Antibody (C-term) with HeLa cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). Actin filaments have been labeled with Alexa Fluor 555 phalloidin (red). DAPI was used to stain the cell nuclear (blue).



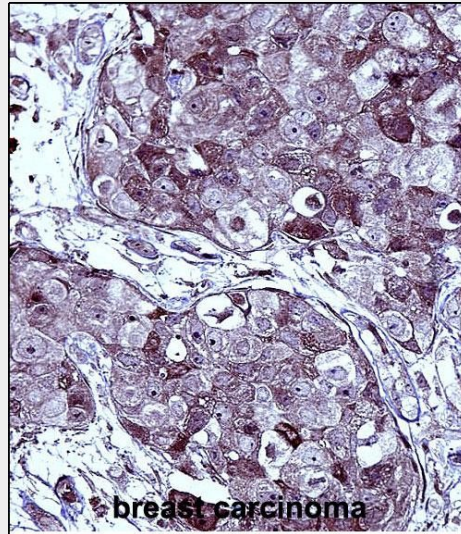
Confocal immunofluorescent analysis of TYSY Antibody (C-term) with WiDr cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). Actin filaments have been labeled with Alexa Fluor 555 phalloidin (red). DAPI was used to stain the cell nuclear (blue).



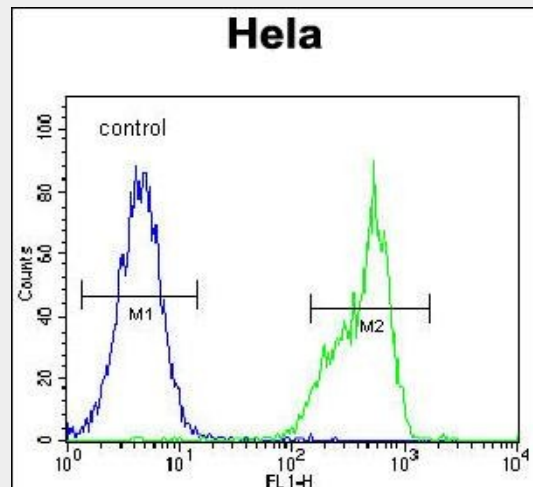
TYSY Antibody (C-term) (Cat. #AX10003) western blot analysis in HeLa, Jurkat and HL-60 cell line lysates (35ug/lane). This demonstrates the TYSY antibody detected the TYSY protein (arrow).



TYSY Antibody (C-term) immunohistochemistry analysis in formalin fixed and paraffin embedded human colon carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of TYSY Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.



TYSY Antibody (C-term) immunohistochemistry analysis in formalin fixed and paraffin embedded human breast carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of TYSY Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.



TYSY Antibody (C-term) flow cytometric analysis of HeLa cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

### **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)