

# TYSY Antibody(C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AX10003

## Product Information

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<b>Application</b>	WB, IHC-P, IF, FC, E
<b>Primary Accession</b>	<a href="#">P04818</a>
<b>Reactivity</b>	Human
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	Rabbit IgG
<b>Clone Names</b>	RB20041
<b>Calculated MW</b>	35716
<b>Antigen Region</b>	265-294

## Additional Information

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<b>Gene ID</b>	7298
<b>Other Names</b>	Thymidylate synthase, TS, TSase, TYMS, TS
<b>Target/Specificity</b>	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.
<b>Dilution</b>	WB~~1:2000 IHC-P~~1:500 IF~~1:50 FC~~1:50 E~~Use at an assay dependent concentration.
<b>Format</b>	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is purified through a protein A column, followed by peptide affinity purification.
<b>Storage</b>	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.
<b>Precautions</b>	TYSY Antibody(C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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<b>Name</b>	TYMS ( <a href="#">HGNC:12441</a> )
<b>Synonyms</b>	TS
<b>Function</b>	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

## Background

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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.

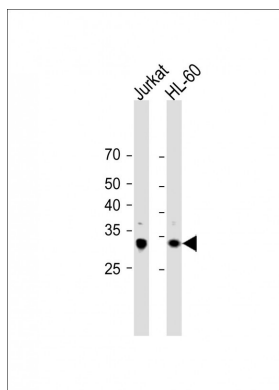
## References

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

## Images

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All lanes: Anti-TYSY Antibody(C-term) at 1:500 dilution  
Lane 1: Jurkat whole cell lysate Lane 2: HL-60 whole cell lysate  
Lysates/proteins at 20 µg per lane. Secondary: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 32 KDa  
Blocking/Dilution buffer: 5% NFDm/TBST.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.