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TYSY Antibody(C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AX10003

Specification

TYSY Antibody(C-term) - Product Information

Application	**WB, FC, IF, IHC-P,E**
Primary Accession	P04818
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
WB~~1:2000
FC~~1:50
IF~~1:50
IHC-P~~1:500
E~~Use at an assay dependent concentration.

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 (CH2H4folate) as a 1- carbon donor and reductant and contributes to the de novo mitochondrial thymidylate biosynthesis pathway.

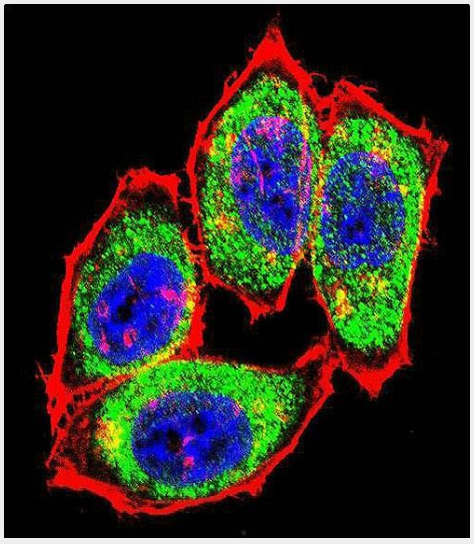
Cellular Location
Nucleus. Cytoplasm. Mitochondrion. Mitochondrion matrix. Mitochondrion inner membrane

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 Cytomety
- 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 lgG (green). Actin filaments have been labeled with Alexa Fluor 555 phalloidin (red). DAPI was used to stain the cell nuclear (blue).

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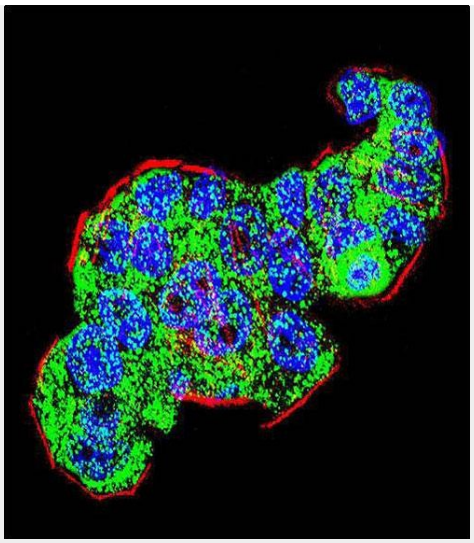
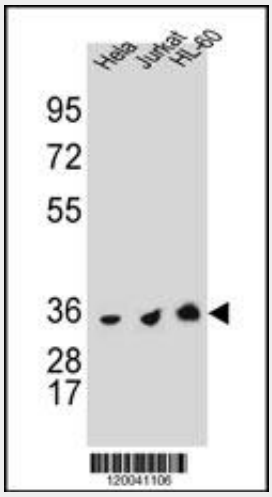
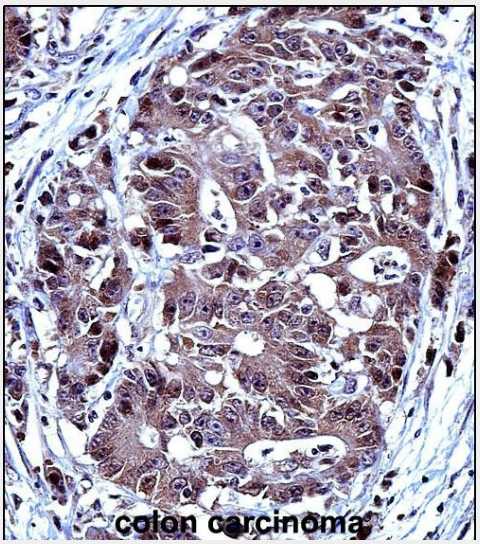


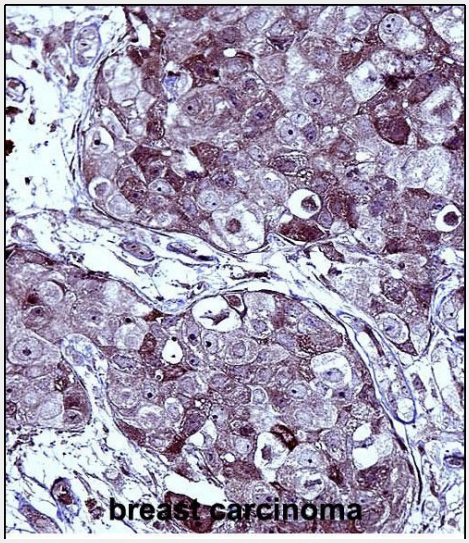
Confocal immunofluorescent analysis of TYSY Antibody (C-term) with WiDr cell followed by Alexa Fluor 488-conjugated goat anti-rabbit lgG (green). Actin filaments have been labeled with Alexa Fluor 555 phalloidin (red). DAPI was used to stain the cell nuclear (blue).



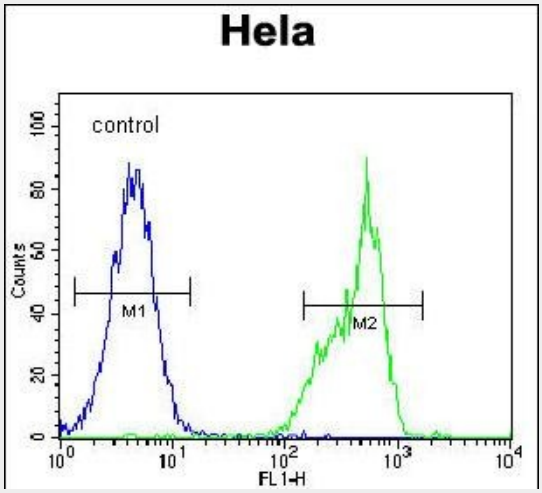
TYSY Antibody (C-term) (Cat. #AX10003) western blot analysis in Hela,Jurkat and HL-60 cell line lysates (35ug/lane).This demonstrates the TYSY antibody detected the TYSY protein (arrow).



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)