

TYSY Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AW5168

Specification

TYSY Antibody (C-term) - Product Information

Application WB,E
Primary Accession P04818
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 (CH2H4folate) as a 1- carbon donor and reductant and contributes to the de novo mitochondrial thymidylate biosynthesis pathway.

Cellular Location

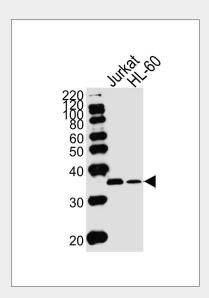
Nucleus. Cytoplasm. Mitochondrion. Mitochondrion matrix. Mitochondrion inner membrane

TYSY Antibody (C-term) - Protocols

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

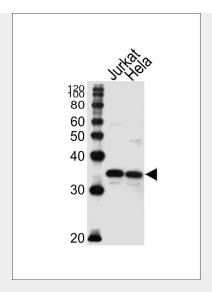
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

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 20ug 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)