

Thymidylate synthase Rabbit mAb

Catalog No.: A24167 **Recombinant**

Basic Information

Observed MW

36kDa

Calculated MW

36kDa

Category

Primary antibody

Applications

WB, IHC-P, IF/ICC, ELISA

Cross-Reactivity

Human, Mouse, Rat

CloneNo number

ARC65465

Background

Thymidylate synthase catalyzes the methylation of deoxyuridylate to deoxythymidylate using, 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. Expression of this gene and that of a naturally occurring antisense transcript, mitochondrial enolase superfamily member 1 (GeneID:55556), vary inversely when cell-growth progresses from late-log to plateau phase. Polymorphisms in this gene may be associated with etiology of neoplasia, including breast cancer, and response to chemotherapy.

Recommended Dilutions

WB 1:2000 - 1:10000**IHC-P** 1:100 - 1:500**IF/ICC** 1:50 - 1:200

ELISA Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements.

Immunogen Information

Gene ID

7298

Swiss Prot

P04818

Immunogen

Recombinant protein (or fragment). This information is considered to be commercially sensitive.

Synonyms

TS; TMS; DKCD; HST422; Thymidylate synthase

Contact

 | 400-999-6126 | cn.market@abclonal.com.cn | www.abclonal.com.cn

Product Information

Source

Rabbit

Isotype

IgG

Purification

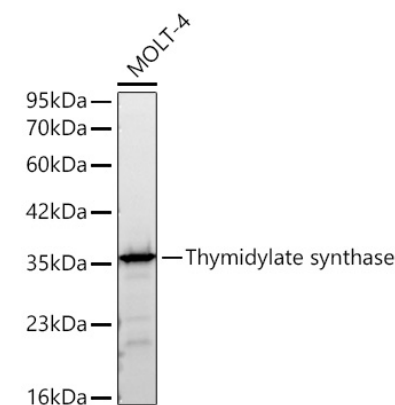
Affinity purification

Storage

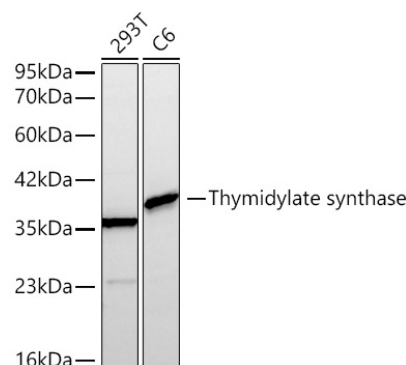
Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS containing 50% glycerol and 0.05% BSA, preserved with proclin300 or sodium azide (as specified on the Certificate of Analysis), pH 7.3.

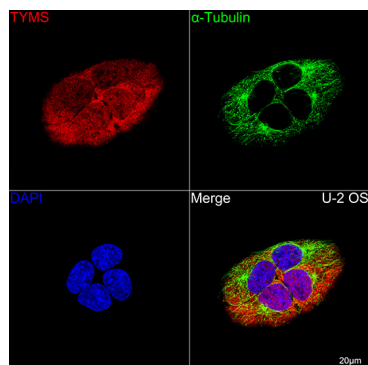
Validation Data



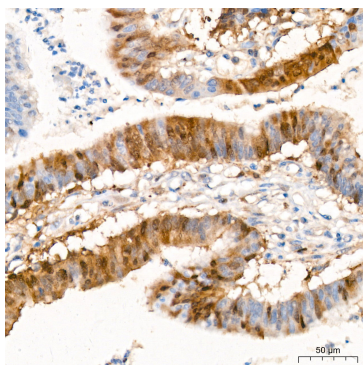
Western blot analysis of lysates from MOLT-4 cells using Thymidylate synthase Rabbit mAb (A24167) at 1:5000 dilution incubated overnight at 4°C.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25 µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 15s.



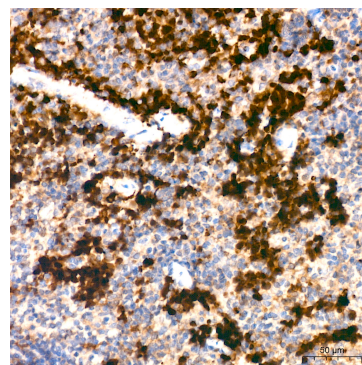
Western blot analysis of various lysates using Thymidylate synthase Rabbit mAb (A24167) at 1:5000 dilution incubated overnight at 4°C.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25 µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 45s.



Confocal imaging of U-2 OS cells using Thymidylate synthase Rabbit mAb (A24167, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with α-Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) Ab (AS076, dilution 1:500) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.

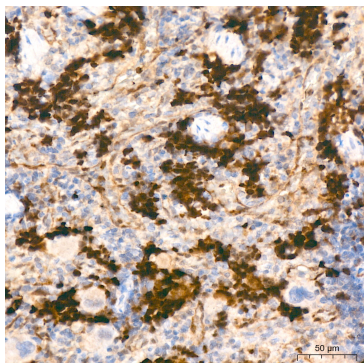


Immunohistochemistry analysis of paraffin-embedded Human colon carcinoma tissue using Thymidylate synthase Rabbit mAb (A24167) at a dilution of 1:300 (40x lens). High pressure antigen retrieval was performed with 0.01 M citrate buffer (pH 6.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Mouse spleen tissue using Thymidylate synthase Rabbit mAb (A24167) at a dilution of 1:300 (40x lens). High pressure antigen retrieval was performed with 0.01 M citrate buffer (pH 6.0) prior to IHC staining.

Validation Data



Immunohistochemistry analysis of paraffin-embedded Rat spleen tissue using Thymidylate synthase Rabbit mAb (A24167) at a dilution of 1:300 (40x lens). High pressure antigen retrieval was performed with 0.01 M citrate buffer (pH 6.0) prior to IHC staining.