

KD-Validated Anti-Thymidylate Synthase Rabbit Monoclonal Antibody

Rabbit monoclonal antibody Catalog # AGI1380

Specification

KD-Validated Anti-Thymidylate Synthase Rabbit Monoclonal Antibody - Product Information

Application WB, FC, ICC Primary Accession P04818

Reactivity
Clonality
Isotype
Human, Mouse
Monoclonal
Rabbit IgG

Calculated MW Predicted, 36 kDa; observed, 36 kDa KDa

Gene Name TYM:

Aliases TYMS; Thymidylate Synthetase; HsT422;

Tsase; TMS; TS; Thymidylate Synthase; EC

2.1.1.45; TSase; DKCD

Immunogen A synthesized peptide derived from human

Thymidylate Synthase

KD-Validated Anti-Thymidylate Synthase Rabbit Monoclonal Antibody - Additional Information

Gene ID 7298

Other Names

Thymidylate synthase, TS, TSase, 2.1.1.45, TYMS (<a

href="http://www.genenames.org/cgi-bin/gene symbol report?hgnc id=12441"

target=" blank">HGNC:12441), TS

KD-Validated Anti-Thymidylate Synthase Rabbit Monoclonal Antibody - 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

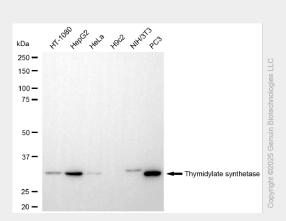
KD-Validated Anti-Thymidylate Synthase Rabbit Monoclonal Antibody - Protocols



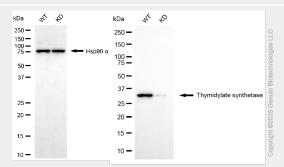
Provided below are standard protocols that you may find useful for product applications.

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

KD-Validated Anti-Thymidylate Synthase Rabbit Monoclonal Antibody - Images

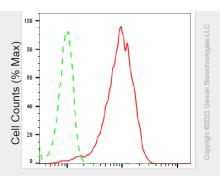


Western blotting analysis using anti-thymidylate synthetase antibody (Cat#61673). Total cell lysates (30 μ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-thymidylate synthetase antibody (Cat#61673, 1:5,000) and HRP-conjugated goat anti rabbit secondary antibody (Cat#201, 1:20,000) respectively. Image was developed using NaQ $^{\text{TM}}$ ECL Substrate Kit (Cat#716).



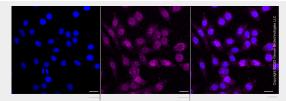
Western blotting analysis using anti-thymidylate synthetase antibody (Cat#61673). Thymidylate synthetase expression in wild type (WT) and thymidylate synthetase (TYMS) knockdown (KD) HSHC cells with 20 μ g of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-thymidylate synthetase antibody (Cat#61673, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (Cat#201, 1:20,000) respectively. Image was developed using NaQ[™] ECL Substrate Kit (Cat#716).





Thymidylate synthetase-Alexa Fluor® 647

Flow cytometric analysis of Thymidylate synthetase expression in HepG2 cells using anti-Thymidylate synthetase antibody (Cat#61673, 1:2,000). Green, isotype control; red, Thymidylate synthetase.



Immunocytochemical staining of HepG2 cells with anti-Thymidylate synthetase antibody (Cat#61673, 1:1,000). Nuclei were stained blue with DAPI; Thymidylate synthetase was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar, 20 µm.