

Datasheet for ABIN6940822
anti-TYMS antibody (AA 60-174)

7 Images

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Overview

Quantity:	100 µg
Target:	TYMS
Binding Specificity:	AA 60-174
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This TYMS antibody is un-conjugated
Application:	Immunofluorescence (IF), Western Blotting (WB), Flow Cytometry (FACS), Immunohistochemistry (IHC), Immunostaining (Ist), Radioimmunoassay (RIA), Staining Methods (StM)

Product Details

Immunogen:	Recombinant human thymidylate synthase protein fragment (around aa 60-174) (exact sequence is proprietary)
Clone:	TYMS-1884
Isotype:	IgG2c kappa
Specificity:	It recognizes a protein of 36 kDa, identified as Thymidylate Synthase (TS) (EC 2.1.1.45). It converts deoxyuridine monophosphate (dUMP) to deoxythymidine monophosphate (dTMP), which is essential for DNA biosynthesis. TS is also a critical target for the fluoropyrimidines, an important group of antineoplastic drugs that are widely used in the treatment of solid tumors. Both 5-FU and fluorodeoxyuridine are converted in tumor cells to FdUMP which inactivates TS

Product Details

by formation of a ternary covalent complex in the presence of the folate cofactor 5,10-methylenetetrahydrofolate. Expression of TS protein has been reported to associate with response to 5-fluorouracil (5-FU) in human colorectal, gastric, head and neck, and breast carcinomas.

Purification: Purified by Protein A/G

Target Details

Target: TYMS

Alternative Name: TYMS ([TYMS Products](#))

Target Type: Viral Protein

Molecular Weight: 36kDa

Gene ID: 7298

UniProt: [P04818](#)

Pathways: [Mitotic G1-G1/S Phases](#)

Application Details

Application Notes: Positive Control: MOLT4, Ramos, 5-FU-resistant colon carcinoma cell lines (NCI H630R10, NCI H630R1), 5-FU-resistant breast cancer cell lines, MCF-Ad5 and MCF-Ad10. Testicular carcinomas.

Known Application: Flow Cytometry (1-2 µg/million cells), Immunofluorescence (1-2 µg/mL), Western Blot (1-2 µg/mL), Immunohistochemistry (Formalin-fixed) (1-2 µg/mL for 30 minutes at RT), (Staining of formalin-fixed tissues is enhanced by boiling tissue sections in 10 mM Citrate Buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes), Optimal dilution for a specific application should be determined.

Restrictions: For Research Use only

Handling

Concentration: 200 µg/mL

Buffer: 10 mM PBS with 0.05 % BSA & 0.05 % azide.

Preservative: Sodium azide

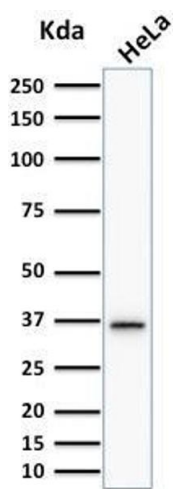
Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which

Handling

should be handled by trained staff only.

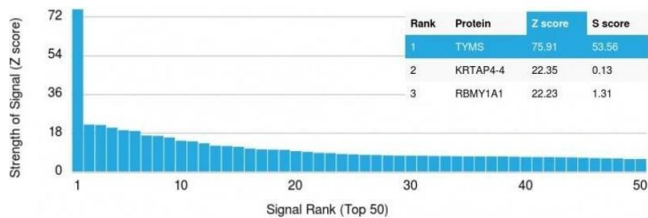
Storage:	4 °C
Storage Comment:	Antibody with azide - store at 2 to 8°C. Antibody is stable for 24 months. „Non-hazardous. No MSDS required.
Expiry Date:	24 months

Images



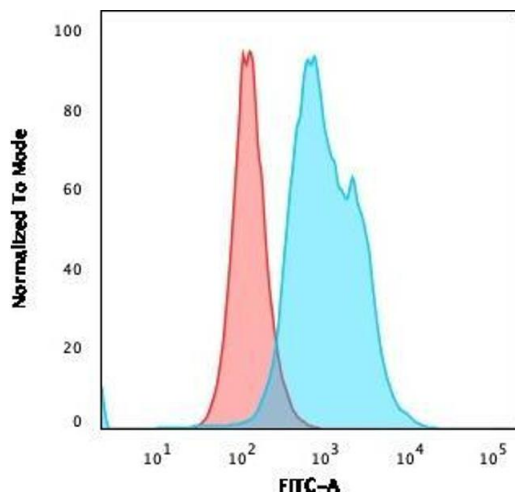
Western Blotting

Image 1. Western Blot Analysis of human HeLa cell lysate using Thymidylate Synthase Mouse Monoclonal Antibody (TYMS/1884).



Protein Array

Image 2. Analysis of Protein Array containing more than 19,000 full-length human proteins using Thymidylate Synthase Monospecific Mouse Monoclonal Antibody (TYMS/1884) Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProtTM array. Z-scores are described in units of standard deviations (SDs) above the mean value of all signals generated on that array. If targets on HuProtTM are arranged in descending order of the Z-score, the S-score is the difference (also in units of SDs) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score



of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.

Flow Cytometry

Image 3. Flow Cytometric Analysis of PFA-fixed MOLT4 cells. Thymidylate Synthase Monospecific Mouse Monoclonal Antibody followed by goat anti-Mouse IgG-CF488 (Blue); Isotype Control (Red).

Please check the [product details page](#) for more images. Overall 7 images are available for ABIN6940822.