

Recombinant Thymidylate Synthase (5-FU Resistance Marker) Antibody

Mouse Monoclonal Antibody [Clone rTYMS/1884]

Catalog No	Format	Size
7298-MSM6-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
7298-MSM6-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
7298-MSM6-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

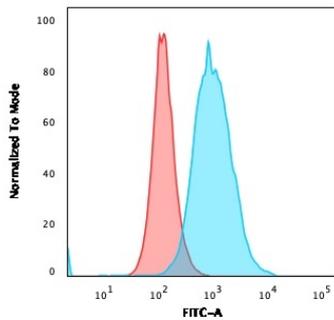
Applications	Tested Dillution	Note
Flow Cytometry (Flow)	1-2ug/million cells	
Immunofluorescence (IF)	1-3ug/ml	
Western Blot (WB)	2-4ug/ml	

Product Details

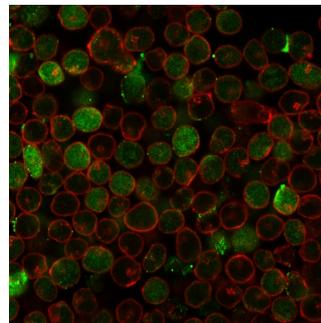
Clone	rTYMS/1884
Gene Name	TYMS
Immunogen	Recombinant human thymidylate synthase protein fragment (around aa 60-174) (exact sequence is proprietary)
Host	Mouse
Clonality	Monoclonal
Isotype / Light Chain	IgG1 / Kappa
Mol. Weight of Antigen	36kDa
Cellular Localization	Cytoplasm, Mitochondrion, Mitochondrion inner membrane, Mitochondrion matrix, Nucleus
Species Reactivity	Human
Positive Control	MOLT-4 or Ramos cells. Testicular carcinomas. Brain.

*Optimal dilution for a specific application should be determined.

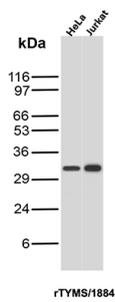
Product Images for Recombinant Thymidylate Synthase (5-FU Resistance Marker) Antibody



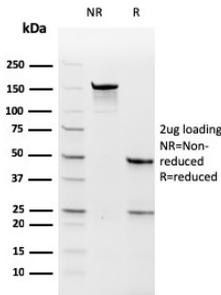
Flow Cytometric Analysis of PFA-fixed MOLT4 cells. TYMS Recombinant Mouse Monoclonal Antibody (rTYMS/1884) followed by goat anti-Mouse IgG-CF488 (Blue); Isotype Control (Red).



Immunofluorescence Analysis of PFA fixed MOLT-4 cells labeling Thymidylate Synthase Recombinant Mouse Monoclonal (rTYMS/1884) followed by Goat anti-mouse IgG-CF488 (Green). Membrane is labeled with Phalloiden (Red).



Western Blot Analysis of HeLa and Jurkat cell lysates using Thymidylate Synthase Recombinant Mouse Monoclonal Antibody (rSOX2/1792).



SDS-PAGE Analysis of Purified TYMS Recombinant Mouse Monoclonal Antibody (rTYMS/1884). Confirmation of Purity and Integrity of Antibody.

Specificity & Comments

It recognizes a protein of 36kDa, 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 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.

Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

Supplied As

200ug/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA at 1.0mg/ml.

Storage and Stability

Antibody with azide - store at 2 to 8°C. Antibody is stable for 24 months. ,Non-hazardous. No MSDS required.

Research Areas

Cardiovascular