

Recombinant Thymidylate Synthase (5-FU Resistance Marker) Antibody

Rabbit Monoclonal Antibody [Clone TYMS/9091R]

Catalog No	Format	Size
7298-RBM7-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
7298-RBM7-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
7298-RBM7-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

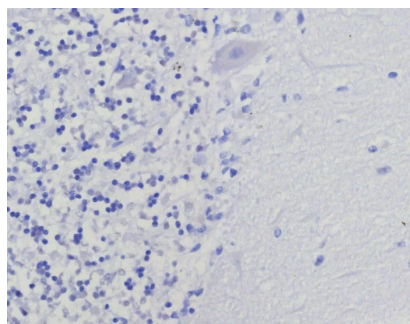
Applications	Tested Dillution	Note
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes
Western Blot (WB)	2-4ug/ml	

Product Details

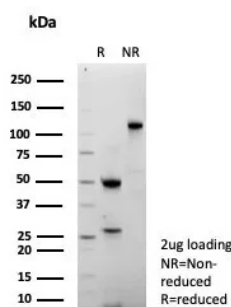
Clone	TYMS/9091R
Gene Name	TYMS
Immunogen	Recombinant human thymidylate synthase protein fragment (around aa 1-200) (exact sequence is proprietary)
Host	Rabbit
Clonality	Monoclonal
Isotype / Light Chain	IgG / Kappa
Mol. Weight of Antigen	36kDa
Cellular Localization	Nucleus. Cytoplasm.
Species Reactivity	Human
Positive Control	5-FU-resistant colon carcinoma cell lines (NCI H630R1 MCF-Ad5 and MCF-Ad10. Testicular carcinomas. MOLT4; Ramos NCI H630R1); 5-FU-resistant breast cancer cell lines, HeLa, Jurkat.

**Optimal dilution for a specific application should be determined.*

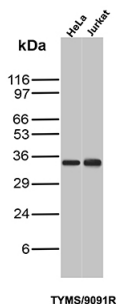
Product Images for Recombinant Thymidylate Synthase (5-FU Resistance Marker) Antibody



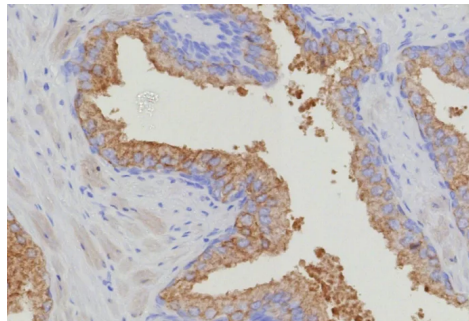
IHC analysis of formalin-fixed, paraffin-embedded human brain. Negative tissue control using TYMS/9091R at 2ug/ml in PBS for 30min RT. HIER: Tris/EDTA, pH9.0, 45min. 2°C: HRP-polymer, 30min. DAB, 5min.



SDS-PAGE Analysis of Purified TYMS Recombinant Rabbit Monoclonal Antibody (TYMS/9091R). Confirmation of Purity and Integrity of Antibody.



Western Blot Analysis of HeLa and Jurkat cell lysates using Thymidylate Synthase Recombinant Rabbit Monoclonal Antibody (TYMS/9091R).



Formalin-fixed, paraffin-embedded human prostate carcinoma stained with Thymidylate Synthase Recombinant Rabbit Monoclonal (TYMS/9091R). HIER: Tris/EDTA, pH9.0, 45min. 2°C: HRP-polymer, 30min. DAB, 5min.

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 (dTTP), 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