

## 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

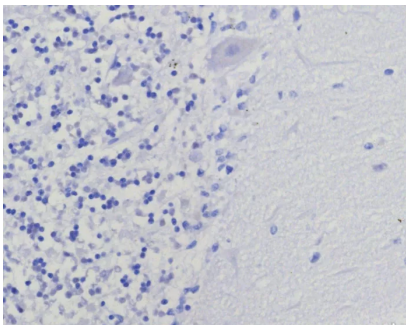
Applications	Tested Dillution	Note
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes

### Product Details

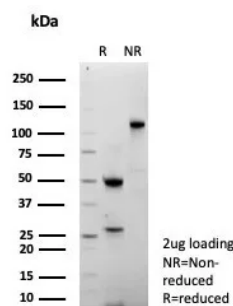
<b>Clone</b>	TYMS/9091R
<b>Gene Name</b>	TYMS
<b>Immunogen</b>	Recombinant human thymidylate synthase protein fragment (around aa 1-200) (exact sequence is proprietary)
<b>Host</b>	Rabbit
<b>Clonality</b>	Monoclonal
<b>Isotype / Light Chain</b>	IgG / Kappa
<b>Mol. Weight of Antigen</b>	36kDa
<b>Cellular Localization</b>	Nucleus. Cytoplasm.
<b>Species Reactivity</b>	Human
<b>Positive Control</b>	5-FU-resistant colon carcinoma cell lines (NCI H630R10 MCF-Ad5 and MCF-Ad10. Testicular carcinomas. MOLT4; Ramos NCI H630R1); 5-FU-resistant breast cancer cell lines

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

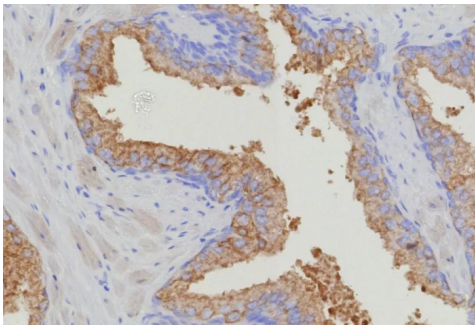
### Product Images for Recombinant Thymidylate Synthase (5-FU Resistance Marker) Antibody



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.



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 (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

---