

## 36-3324: Anti-Thymidylate Synthase (5-FU Resistance Marker) Monoclonal Antibody(Clone: rTYMS/1884)

<b>Clonality :</b>	Monoclonal
<b>Clone Name :</b>	rTYMS/1884
<b>Application :</b>	ELISA,FACS,IF
<b>Reactivity :</b>	Human
<b>Gene :</b>	TYMS
<b>Gene ID :</b>	7298
<b>Uniprot ID :</b>	P04818
<b>Alternative Name :</b>	dTMP synthase, TMS, TS, TSase, TYMS protein, Tyms thymidylate synthetase
<b>Isotype :</b>	Mouse IgG1, kappa
<b>Immunogen Information :</b>	Recombinant human thymidylate synthase protein fragment (around aa 60-174) (exact sequence is proprietary)

### Description

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.

### Product Info

<b>Amount :</b>	20 µg / 100 µg
<b>Content :</b>	200 µg/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.
<b>Storage condition :</b>	Antibody with azide - store at 2 to 8°C. Antibody is stable for 24 months. Non-hazardous.

### Application Note

ELISA (For coating, order antibody without BSA); Flow Cytometry (1-2ug/million cells); Immunofluorescence (1-2ug/ml);

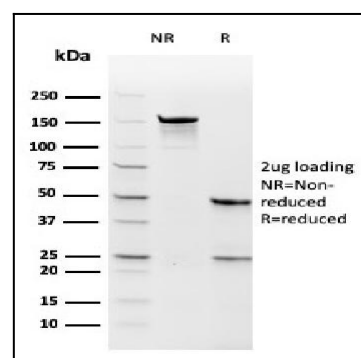


Fig. 1: SDS-PAGE Analysis Purified TYMS Recombinant Mouse Monoclonal Antibody (rTYMS/1884). Confirmation of Purity and Integrity of Antibody.

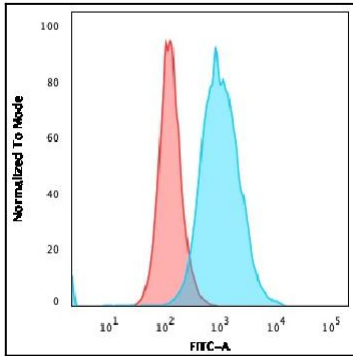


Fig. 2: Flow Cytometric Analysis of PFA-fixed MOLT4 cells. TYMS Recombinant Mouse Monoclonal Antibody (rTYMS/1884) followed by goat anti-Mouse IgG-CF488 (Blue); Isotype Control (Red).