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

Clone Name: rTYMS/1884
Application: ELISA,FACS,IF

Reactivity: Human
Gene: TYMS
Gene ID: 7298
Uniprot ID: P04818

**Alternative Name:** dTMP synthase, TMS, TS, TSase, TYMS protein, Tyms thymidylate synthetase

**Isotype:** Mouse IgG1, kappa

Immunogen Information: 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 drµgs 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**

**Amount:** 20 μg / 100 μg

Content: 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.

**Storage condition :** 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.



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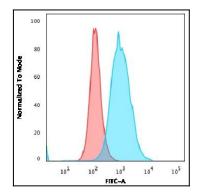


Fig. 2: Flow Cytometric Analysis of PFA-fixed MOLT4 cells. TYMS Recombinant Mouse Monoclonal Antibody (rTYMS/1884) followed by goat anti-Mouse IgG-CF488 (Blue); Isotype Control (Red).