

Product datasheet for **AM50313PU-T**

Thymidylate Synthase (TYMS) Mouse Monoclonal Antibody [Clone ID: TMS715]

Product data:

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| Product Type: | Primary Antibodies |
| Clone Name: | TMS715 |
| Applications: | FC, IF, IHC, IP, WB |
| Recommended Dilution: | ELISA: Use BSA free Antibody for coating. Flow Cytometry: 0.5-1 µg/million cells. Immunofluorescence: 0.5-1 µg/ml. Immunoprecipitation: 0.5-1 µg/500 µg protein lysate. Immunohistochemistry on Frozen and Formalin-Fixed Sections: 0.5-1 µg/ml for 30 minutes at RT. Staining of formalin-fixed tissues requires boiling tissue sections in 10mM Citrate Buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes. Positive Control: 5-FU-resistant colon carcinoma cell lines (NCI H630R10, NCI H630R1); 5-FU-resistant breast cancer cell lines, MCF-Ad5 and MCF-Ad10. Colorectal, gastric, head & neck, and breast carcinomas. |
| Reactivity: | Human |
| Host: | Mouse |
| Isotype: | IgG1 |
| Clonality: | Monoclonal |
| Immunogen: | Recombinant Human Thymidylate synthase. |
| Specificity: | It recognizes a protein of 36kDa, identified as Thymidylate Synthase (TS) (EC 2.1.1.45). Cellular Localization: Cytoplasmic. |
| Formulation: | 10mM PBS State: Purified State: Liquid purified IgG fraction from Bioreactor Concentrate Stabilizer: 0.05% BSA Preservative: 0.05% Sodium Azide |
| Concentration: | lot specific |
| Purification: | Protein A/G Chromatography |
| Conjugation: | Unconjugated |



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| Storage: | Store undiluted at 2-8°C. |
| Stability: | Shelf life: one year from despatch. |
| Predicted Protein Size: | 36 kDa |
| Gene Name: | thymidylate synthetase |
| Database Link: | Entrez Gene 7298 Human P04818 |
| Background: | TS 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 is associated with response to 5-fluorouracil (5-FU) in human colorectal, gastric, head and neck, and breast carcinomas. |
| Synonyms: | TYMS, TSase, OK/SW-cl.29 |