

Code No. 10409

**Anti-  
TS (ATYMSMAB) Mouse IgG MoAb**Volume : 100 µg

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**Introduction** : Thymidylate synthase/TS (EC 2.1.1.45), Dihydropyrimidine dehydrogenase/DPD (EC 1.3.1.2), Thymidine phosphorylase/TP (EC 2.4.2.4) and Orotate phosphoribosyl transferase/OPRT (EC 2.4.2.10) are known as key enzymes related to nucleic-acid metabolism within the body.

These enzymes are also known to be related to activation, metabolism and catabolism of 5-FU (5-fluorouracil) which is a metabolic antagonist being widely used for solid cancers including digestive system cancer and breast cancer as an anticancer drug. And there are some reports regarding correlation between the enzymes and the effects of 5-FU-based anticancer drugs. Additionally, TS and DPD have been reported to be prognostification-related factors of individuals who suffer cancers.

As seen above, this antibody is useful for researches of nucleic acid and expression of those proteins in cancer tissues including effect prediction of 5-FU-based anticancer drugs and searching for prognostification factors.

**Antigen** : Human TS protein**Source** : Mouse-Mouse hybridoma**Clone** : ATYMSMAB**Purification** : Affinity purified with Protein A**Form** : Lyophilized product in PBS containing 1 % BSA and 0.05 % NaN<sub>3</sub>**How to use** : 1.0 mL deionized water will be added to the product, then its concentration comes to 100 µg/mL**Stability** : Lyophilized product, 5 years at 2 - 8 °C  
: Solution, 2 years at -20 °C

**Application** : This antibody can be used for immunohistochemistry with formalin fixed paraffin embedded tissues after heat-induced antigen retrieval (for 40 minutes at 95 - 99°C, in Tris-buffer contains EDTA, pH 9.0 or EDTA solution, pH 8.0). High-sensitive methods like as 3-step polymer system are recommended (primary incubation: overnight at room temperature). The optimal dilution of this antibody is x200 (about 0.5 µg/mL), however, conditions should be optimized by each laboratory.

: This antibody can be used for western blotting in concentration about 1 µg/mL.

**Reference** : Okabe H, Koizumi K, Tsujimoto H, Fukushima M. Epitope analysis and utility of monoclonal antibodies to native and recombinant human thymidylate synthase. *Int J Mol Med.* 2000 Feb;5(2):133-8.

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*For research use only, not for use in diagnostic procedures.*