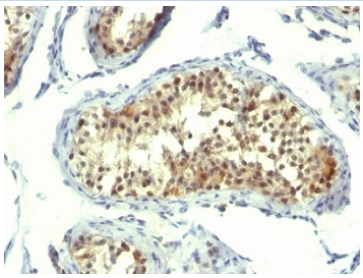
Thymidylate Synthase Antibody [clone TMS715] (V2288)

Catalog No.	Formulation	Size
V2288-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2288-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2288SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V2288IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

Bulk quote request

Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	TMS715
Purity	Protein G purified monoclonal antibody
Buffer	1X PBS, pH 7.4
Gene ID	7298
Localization	Cytoplasmic, nuclear
Applications	Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT
Limitations	This **Thymidylate Synthase antibody** is available for research use only.



Formalin-fixed, paraffin-embedded human testicular carcinoma stained with Thymidylate Synthase antibody (clone TMS715).

Description

This antibody is specific for a protein of 36kDa, identified as Thymidylate Synthase (TS). Thymidylate synthase converts deoxyuridine monophosphate (dUMP) to deoxythymidine monophosphate (dTMP), which is essential for DNA biosynthesis. Thymidylate synthase is also a critical target for the fluoropyrimidines, an important group of anti-neoplastic 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 thymidylate synthase by formation of a ternary covalent complex in the presence of the folate cofactor 5,10-methylenetetrahydrofolate. Expression of thymidylate synthase protein is associated with response to 5-fluorouracil (5-FU) in human colorectal, gastric, head and neck, and breast carcinomas.

Application Notes

The concentration stated for each application is a general starting point. Variations in protocols, secondaries and substrates may require the antibody to be titered up or down for optimal performance.

1. Staining of formalin-fixed tissues is enhanced by boiling tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min followed by cooling at RT for 20 minutes.
2. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

Recombinant human Thymidylate synthase was used as the immunogen for this antibody.

Storage

Store the Thymidylate Synthase antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

TMS, TS, TSase, TYMS protein, Tyms

References (2)

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