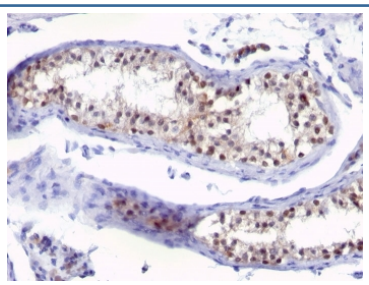
Anti-Thymidylate Synthase Antibody [clone SPM453] (V9092)

Catalog No.	Formulation	Size
V9092-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V9092-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V9092SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V9092IHC-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

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	SPM453
Purity	Protein G affinity chromatography
UniProt	P04818
Localization	Cytoplasmic, nuclear
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
Limitations	This anti-Thymidylate Synthase antibody is available for research use only.



IHC: Formalin-fixed, paraffin-embedded human testicular carcinoma stained with anti-Thymidylate Synthase antibody (clone SPM453).

Description

It recognizes a protein of 36kDa, identified as Thymidylate Synthase (TS). 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.

Application Notes

The optimal dilution of the anti-Thymidylate Synthase antibody for each application should be determined by the researcher.

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 protein was used as the immunogen for this anti-Thymidylate Synthase antibody.

Storage

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