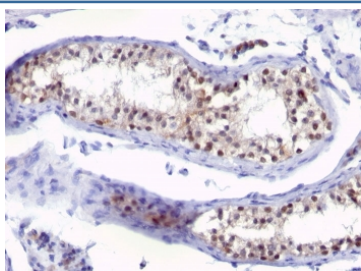


## Anti-Thymidylate Synthase Antibody [clone SPM453] (V9092)

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**

<b>Availability</b>	1-3 business days
<b>Species Reactivity</b>	Human
<b>Format</b>	Purified
<b>Clonality</b>	Monoclonal (mouse origin)
<b>Isotype</b>	Mouse IgG1, kappa
<b>Clone Name</b>	SPM453
<b>Purity</b>	Protein G affinity chromatography
<b>UniProt</b>	P04818
<b>Localization</b>	Cytoplasmic, nuclear
<b>Applications</b>	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
<b>Limitations</b>	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).