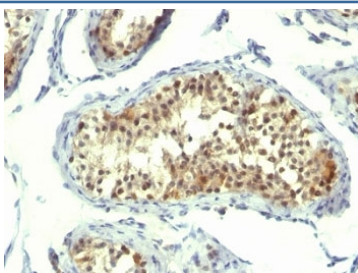


## Thymidylate Synthase Antibody [clone TMS715] (V2288)

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](#)

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

## References (2)