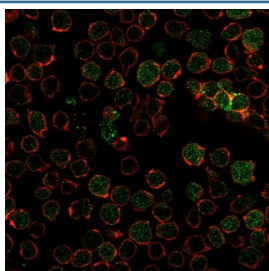


## TYMS Antibody / Thymidylate Synthase [clone TYMS/1884] (V3515)

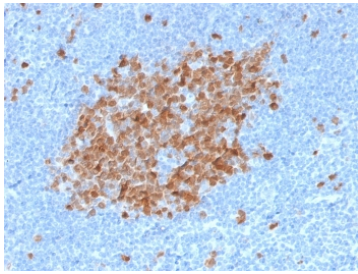
Catalog No.	Formulation	Size
V3515-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3515-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3515SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V3515IHC-7ML	Prediluted 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](#)

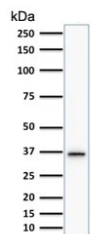
<b>Availability</b>	1-3 business days
<b>Species Reactivity</b>	Human
<b>Format</b>	Purified
<b>Clonality</b>	Monoclonal (mouse origin)
<b>Isotype</b>	Mouse IgG2c, kappa
<b>Clone Name</b>	TYMS/1884
<b>Purity</b>	Protein G affinity chromatography
<b>UniProt</b>	P04818
<b>Localization</b>	Cytoplasmic, nuclear
<b>Applications</b>	Flow Cytometry : 1-2ug/10 <sup>6</sup> cells Immunofluorescence : 1-2ug/ml Western Blot : 1-2ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
<b>Limitations</b>	This TYMS antibody is available for research use only.



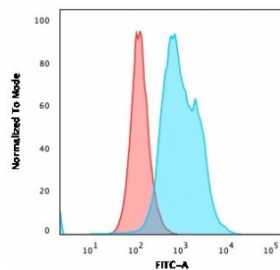
Immunofluorescent staining of PFA-fixed human Ramos cells with TYMS antibody cocktail (green, clone TYMS/1884) and Phalloidin (red).



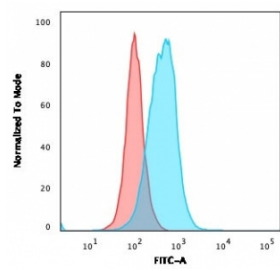
IHC testing of FFPE human tonsil tissue with TYMS antibody. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min followed by cooling at RT for 20 min.



Western blot testing of human HeLa cell lysate with TYMS antibody (clone TYMS/1884). Predicted molecular weight ~36 kDa.



Flow cytometry testing of PFA-fixed human MOLT4 cells with TYMS antibody (clone TYMS/1884); Red=isotype control, Blue= TYMS antibody.

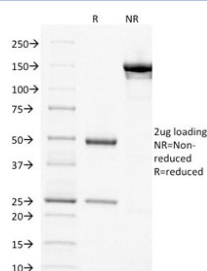


Flow cytometry testing of PFA-fixed human Ramos cells with TYMS antibody (clone TYMS/1884); Red=isotype control, Blue= TYMS antibody.

#### Human Protein Microarray Specificity Validation



Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using TYMS antibody (clone TYMS/1884). These results demonstrate the foremost specificity of the TYMS/1884 mAb.   
Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt(TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt(TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.



SDS-PAGE analysis of purified, BSA-free TYMS antibody (clone TYMS/1884) as confirmation of integrity and purity.

## Description

This antibody recognizes a protein of 36kDa, identified as Thymidylate Synthase (TS, TYMS). 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 TYMS antibody for each application should be determined by the researcher.

1. 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

A recombinant human parital protein corresponding to amino acids 60-174 was used as the immunogen for this TYMS antibody.

## Storage

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