

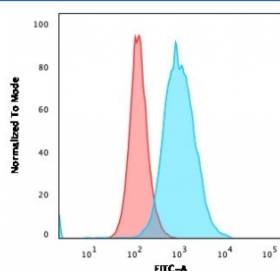
## Recombinant Thymidylate Synthase Antibody [clone rTYMS/1884] (V8144)

Catalog No.	Formulation	Size
V8144-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V8144-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V8144SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

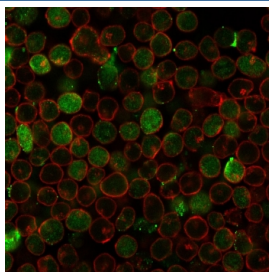
Recombinant **MOUSE MONOCLONAL**

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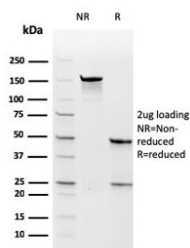
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Recombinant Mouse Monoclonal
Isotype	Mouse IgG1, kappa
Clone Name	rTYMS/1884
Purity	Protein G affinity chromatography
UniProt	P04818
Localization	Nuclear, cytoplasmic
Applications	Flow Cytometry : 1-2ug/million cells in 0.1ml Immunofluorescence : 1-2ug/ml
Limitations	This recombinant Thymidylate Synthase antibody is available for research use only.



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



Immunofluorescent staining of PFA-fixed human MOLT4 cells with recombinant Thymidylate Synthase antibody (green, clone rTYMS/1884) and Phalloidin (red).



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

## Description

It recognizes a protein of 36kDa, identified as Thymidylate Synthase (TS) (EC 2.1.1.45). It 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 has been reported to associate with response to 5-fluorouracil (5-FU) in human colorectal, gastric, head and neck, and breast carcinomas.

## Application Notes

Optimal dilution of the recombinant Thymidylate Synthase antibody should be determined by the researcher.

## Immunogen

A recombinant human partial protein (amino acids 60-174) was used as the immunogen for the recombinant Thymidylate Synthase antibody.

## Storage

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