10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

TYMS Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant TYMS.
Catalog # AT4425a

Specification

TYMS Antibody (monoclonal) (M01) - Product Information

Application	**IF, WB, IHC, E**
Primary Accession	P04818
Other Accession	BC013919
Reactivity	**Human**
Host	**mouse**
Clonality	**Monoclonal**
Isotype	**IgG1 Kappa**
Calculated MW	**35716**

TYMS Antibody (monoclonal) (M01) - Additional Information

Gene ID 7298

Other Names
Thymidylate synthase, TS, TSase, TYMS, TS

Target/Specificity
TYMS (AAH13919, 111 a.a. ~ 210 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

Dilution
WB~~1:500~1000

Format
Clear, colorless solution in phosphate buffered saline, pH 7.2 .

Storage
Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Precautions
TYMS Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

TYMS Antibody (monoclonal) (M01) - Protocols

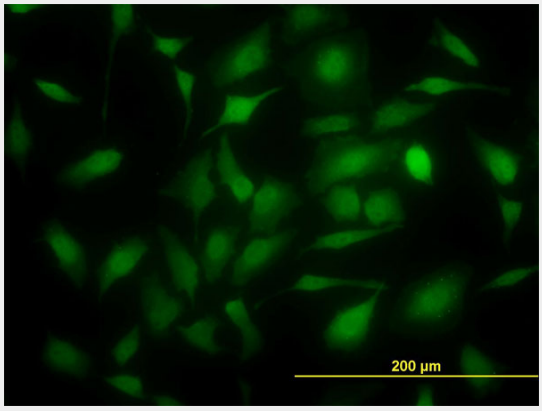
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry

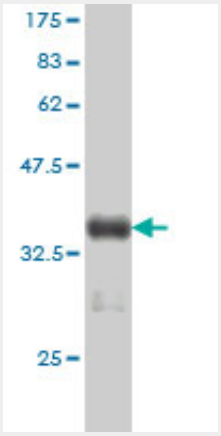
10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

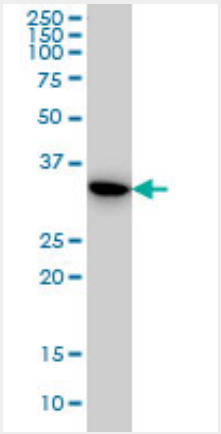
TYMS Antibody (monoclonal) (M01) - Images



Immunofluorescence of monoclonal antibody to TYMS on HeLa cell. [antibody concentration 20 ug/ml]

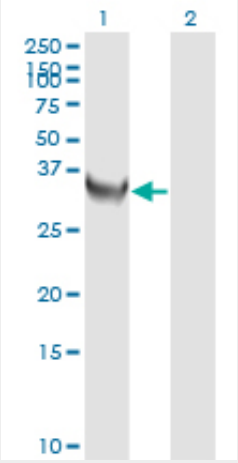


Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (36.52 KDa) .



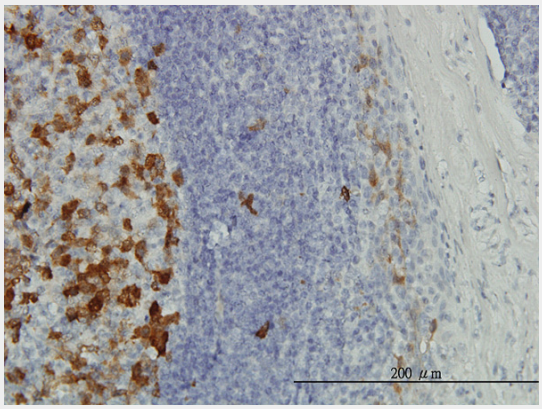
TYMS monoclonal antibody (M01), clone 3A1 Western Blot analysis of TYMS expression in HeLa ((Cat # AT4425a)

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

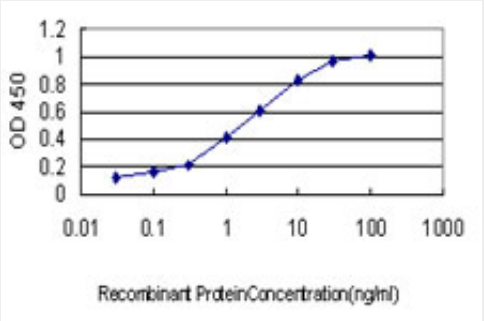


Western Blot analysis of TYMS expression in transfected 293T cell line by TYMS monoclonal antibody (M01), clone 3A1.

Lane 1: TYMS transfected lysate(35.7 KDa).
Lane 2: Non-transfected lysate.



Immunoperoxidase of monoclonal antibody to TYMS on formalin-fixed paraffin-embedded human tonsil. [antibody concentration 3 ug/ml]



Detection limit for recombinant GST tagged TYMS is approximately 0.03ng/ml as a capture antibody.

TYMS Antibody (monoclonal) (M01) - Background

Thymidylate synthase catalyzes the methylation of deoxyuridylate to deoxythymidylate using 5,10-methylenetetrahydrofolate (methylene-THF) as a cofactor. This function maintains the dTMP (thymidine-5-prime monophosphate) pool critical for DNA replication and repair. The enzyme has been of interest as a target for cancer chemotherapeutic agents. It is considered to be the primary

site of action for 5-fluorouracil, 5-fluoro-2-prime-deoxyuridine, and some folate analogs. Expression of this gene and that of a naturally occuring antisense transcript rTSalpha (GeneID:55556) vary inversely when cell-growth progresses from late-log to plateau phase.

TYMS Antibody (monoclonal) (M01) - References

Variants in the dihydropyrimidine dehydrogenase, methylenetetrahydrofolate reductase and thymidylate synthase genes predict early toxicity of 5-fluorouracil in colorectal cancer patients. Kristensen MH, et al. J Int Med Res, 2010 May-Jun. PMID 20819423.Genetic polymorphisms associated with 5-Fluorouracil-induced neurotoxicity. Kim SR, et al. Chemotherapy, 2010. PMID 20714149.Association of genetic variation in cystathionine-beta-synthase and arsenic metabolism. Porter KE, et al. Environ Res, 2010 Aug. PMID 20670920.Value of gene polymorphisms as markers of 5-FU therapy response in stage III colon carcinoma: a pilot study. Fari?a-Sarasqueta A, et al. Cancer Chemother Pharmacol, 2010 Jul 28. PMID 20665215.Polymorphisms of thymidylate synthase gene 5'- and 3'-untranslated region and risk of gastric cancer in Koreans. Yim DJ, et al. Anticancer Res, 2010 Jun. PMID 20651387.