

UMPS Antibody (monoclonal) (M05)

Mouse monoclonal antibody raised against a partial recombinant UMPS. Catalog # AT4467a

Specification

UMPS Antibody (monoclonal) (M05) - Product Information

Application WB, IF, E **Primary Accession** P11172 Other Accession NM 000373 Reactivity Human Host mouse Clonality **Monoclonal** Isotype IgG2b Kappa 52222

Calculated MW

UMPS Antibody (monoclonal) (M05) - Additional Information

Gene ID 7372

Other Names

Uridine 5'-monophosphate synthase, UMP synthase, Orotate phosphoribosyltransferase, OPRT, OPRTase, Orotidine 5'-phosphate decarboxylase, ODC, OMPdecase, UMPS

Target/Specificity

UMPS (NP 000364, 381 a.a. ~ 479 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

Dilution

WB~~1:500~1000 IF~~1:50~200 E~~N/A

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

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

Precautions

UMPS Antibody (monoclonal) (M05) is for research use only and not for use in diagnostic or therapeutic procedures.

UMPS Antibody (monoclonal) (M05) - Protocols

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

Western Blot

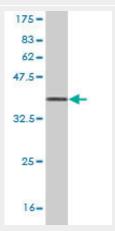


- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

UMPS Antibody (monoclonal) (M05) - Images

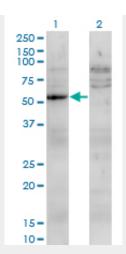


Immunofluorescence of monoclonal antibody to UMPS on HeLa cell . [antibody concentration 10 ug/ml]



Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (36.63 KDa) .

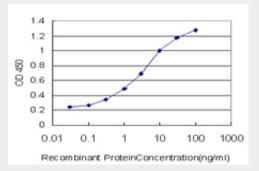




Western Blot analysis of UMPS expression in transfected 293T cell line by UMPS monoclonal antibody (M05), clone 2F5.

Lane 1: UMPS transfected lysate(52.2 KDa).

Lane 2: Non-transfected lysate.



Detection limit for recombinant GST tagged UMPS is approximately 0.1ng/ml as a capture antibody.

UMPS Antibody (monoclonal) (M05) - Background

This gene encodes a uridine 5'-monophosphate synthase. The encoded protein is a bifunctional enzyme that catalyzes the final two steps of the de novo pyrimidine biosynthetic pathway. The first reaction is carried out by the N-terminal enzyme orotate phosphoribosyltransferase which converts orotic acid to orotidine-5'-monophosphate. The terminal reaction is carried out by the C-terminal enzyme OMP decarboxylase which converts orotidine-5'-monophosphate to uridine monophosphate. Defects in this gene are the cause of hereditary orotic aciduria. Alternate splicing results in multiple transcript variants.

UMPS Antibody (monoclonal) (M05) - References

1.Predictive and prognostic markers for the outcome of chemotherapy in advanced colorectal cancer, a retrospective analysis of the phase III randomised CAIRO study.Koopman M, Venderbosch S, van Tinteren H, Ligtenberg MJ, Nagtegaal I, Van Krieken JH, Punt CJ.Eur J Cancer. 2009 Jul;45(11):1999-2006. Epub 2009 May 18.