

**UMPS Antibody (monoclonal) (M05)****Mouse monoclonal antibody raised against a partial recombinant UMPS.****Catalog # AT4467a****Specification**

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**UMPS Antibody (monoclonal) (M05) - Product Information**

Application	IF, WB, E
Primary Accession	<a href="#">P11172</a>
Other Accession	<a href="#">NM_000373</a>
Reactivity	Human
Host	mouse
Clonality	Monoclonal
Isotype	IgG2b Kappa
Calculated MW	52222

**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

**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**

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

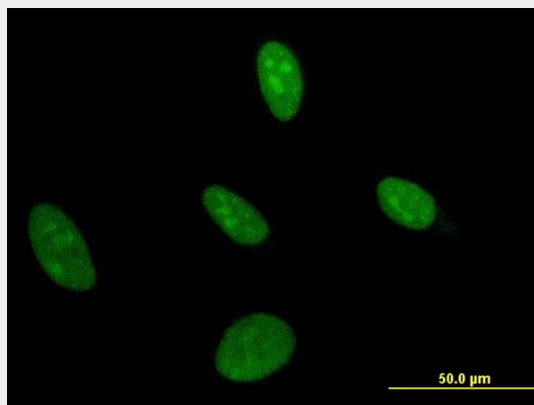
**UMPS Antibody (monoclonal) (M05) - Protocols**

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

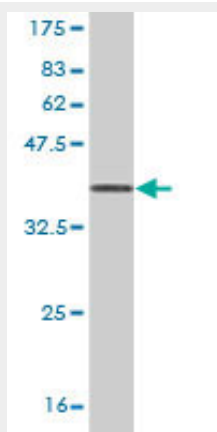
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)

- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

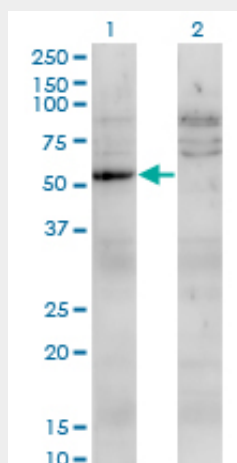
## UMPS Antibody (monoclonal) (M05) - Images



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



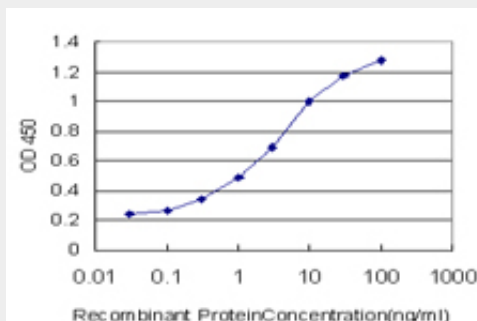
Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (36.63 KDa) .



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.