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UMPS Antibody (monoclonal) (M06)

Mouse monoclonal antibody raised against a partial recombinant UMPS.
Catalog # AT4468a

Specification

UMPS Antibody (monoclonal) (M06) - Product Information

Application	**IF, WB, E**
Primary Accession	P11172
Other Accession	NM_000373
Reactivity	**Human**
Host	**mouse**
Clonality	**Monoclonal**
Isotype	**IgG2b Kappa**
Calculated MW	**52222**

UMPS Antibody (monoclonal) (M06) - 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) (M06) is for research use only and not for use in diagnostic or therapeutic procedures.

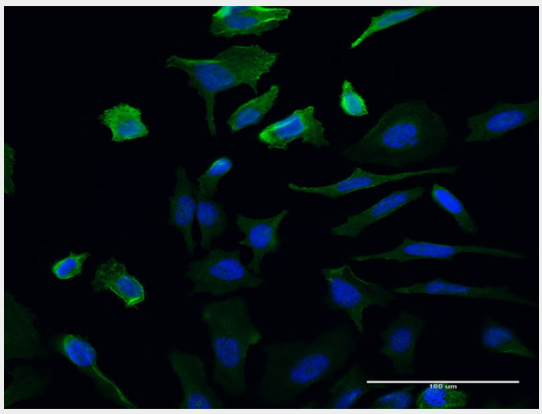
UMPS Antibody (monoclonal) (M06) - Protocols

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

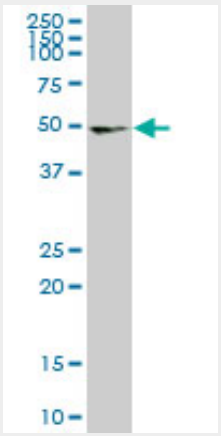
- Western Blot
- Blocking Peptides
- Dot Blot

- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

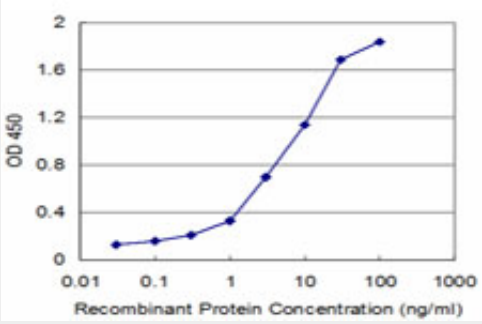
UMPS Antibody (monoclonal) (M06) - Images



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



UMPS monoclonal antibody (M06), clone 2B10. Western Blot analysis of UMPS expression in IMR-32 (Cat # L008V1).



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

UMPS Antibody (monoclonal) (M06) - 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) (M06) - References

1.Novel mRNA isoforms and mutations of uridine monophosphate synthetase and 5-fluorouracil resistance in colorectal cancer.Griffith M, Mwenifumbo JC, Cheung PY, Paul JE, Pugh TJ, Tang MJ, Chittaranjan S, Morin RD, Asano JK, Ally AA, Miao L, Lee A, Chan SY, Taylor G, Severson T, Hou YC, Griffith OL, Cheng GS, Novik K, Moore R, Luk M, Owen D, Brown CJ, Morin GB, Gill S, Tai IT, Marra MA.Pharmacogenomics J. 2012 Jan 17. doi: 10.1038/tpj.2011.65. [Epub ahead of print]