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UMPS Antibody (monoclonal) (M06)

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

Product Information

Application	WB, IF, E
Primary Accession	P11172
Other Accession	NM_000373
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2b Kappa
Clone Names	2B10
Calculated MW	52222

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
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.

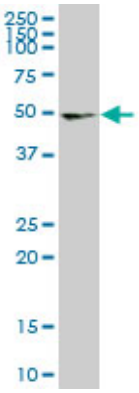
Background

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.

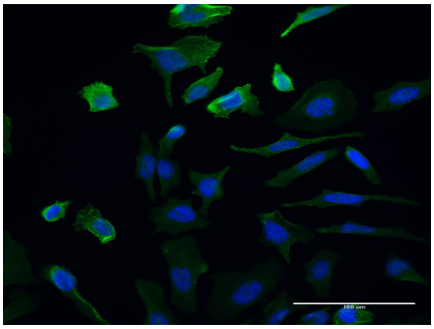
References

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]

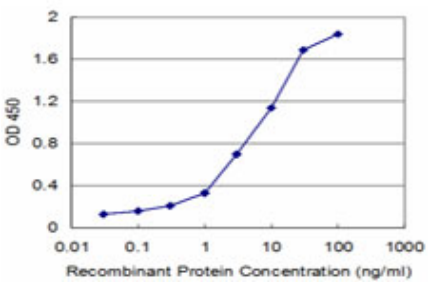
Images



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



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



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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.