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MOCS3 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a full length recombinant MOCS3.
Catalog # AT2885a

Product Information

Application	WB
Primary Accession	O95396
Other Accession	BC015939
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2b kappa
Clone Names	1C5-E8
Calculated MW	49669

Additional Information

Gene ID	27304
Other Names	Adenylyltransferase and sulfurtransferase MOCS3 {ECO:0000255|HAMAP-Rule:MF_03049}, Molybdenum cofactor synthesis protein 3 {ECO:0000255|HAMAP-Rule:MF_03049}, Molybdopterin synthase sulfurylase, MPT synthase sulfurylase, Molybdopterin-synthase adenylyltransferase {ECO:0000255|HAMAP-Rule:MF_03049}, 27780 {ECO:0000255|HAMAP-Rule:MF_03049}, Adenylyltransferase MOCS3 {ECO:0000255|HAMAP-Rule:MF_03049}, Sulfur carrier protein MOCS2A adenylyltransferase {ECO:0000255|HAMAP-Rule:MF_03049}, Molybdopterin-synthase sulfurtransferase {ECO:0000255|HAMAP-Rule:MF_03049}, 28111 {ECO:0000255|HAMAP-Rule:MF_03049}, Sulfur carrier protein MOCS2A sulfurtransferase {ECO:0000255|HAMAP-Rule:MF_03049}, Sulfurtransferase MOCS3 {ECO:0000255|HAMAP-Rule:MF_03049}, MOCS3 {ECO:0000255|HAMAP-Rule:MF_03049}
Target/Specificity	MOCS3 (AAH15939, 1 a.a. ~ 460 a.a) full-length 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	MOCS3 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

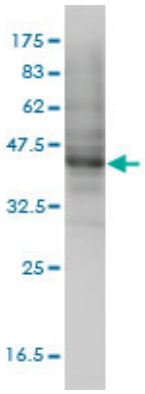
Background

Molybdenum cofactor (MoCo) is necessary for the function of all molybdoenzymes. One of the enzymes required for the biosynthesis of MoCo is molybdopterin synthase (MPT synthase). The protein encoded by this gene adenylates and activates MPT synthase. This gene contains no introns. A pseudogene of this gene is present on chromosome 14.

References

A functional proteomics approach links the ubiquitin-related modifier Urm1 to a tRNA modification pathway. Schlieker CD, et al. Proc Natl Acad Sci U S A, 2008 Nov 25. PMID 19017811.A novel role for human Nfs1 in the cytoplasm: Nfs1 acts as a sulfur donor for MOCS3, a protein involved in molybdenum cofactor biosynthesis. Marelja Z, et al. J Biol Chem, 2008 Sep 12. PMID 18650437.The sulfurtransferase activity of Uba4 presents a link between ubiquitin-like protein conjugation and activation of sulfur carrier proteins. Schmitz J, et al. Biochemistry, 2008 Jun 17. PMID 18491921.Site-directed mutagenesis of the active site loop of the rhodanese-like domain of the human molybdopterin synthase sulfurase MOCS3. Major differences in substrate specificity between eukaryotic and bacterial homologs. Krepinsky K, et al. FEBS J, 2007 Jun. PMID 17459099.Molybdenum cofactor biosynthesis in humans: identification of a persulfide group in the rhodanese-like domain of MOCS3 by mass spectrometry. Matthies A, et al. Biochemistry, 2005 May 31. PMID 15910006.

Images



MOCS3 monoclonal antibody (M01), clone 1C5-E8
Western Blot analysis of MOCS3 expression in HeLa (Cat # L013V1).