10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

USP14 Antibody (monoclonal) (M04)

Mouse monoclonal antibody raised against a partial recombinant USP14.
Catalog # AT4482a

Product Information

Application	WB, IF, E
Primary Accession	P54578
Other Accession	NM_005151
Reactivity	Human, Mouse, Rat
Host	mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	6D6
Calculated MW	56069

Additional Information

Gene ID	9097
Other Names	Ubiquitin carboxyl-terminal hydrolase 14, Deubiquitinating enzyme 14, Ubiquitin thioesterase 14, Ubiquitin-specific-processing protease 14, USP14, TGT
Target/Specificity	USP14 (NP_005142, 395 a.a. ~ 494 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	USP14 Antibody (monoclonal) (M04) is for research use only and not for use in diagnostic or therapeutic procedures.

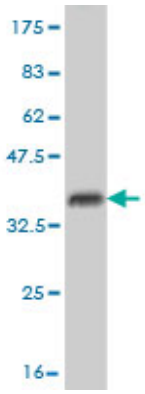
Background

This gene encodes a member of the ubiquitin-specific processing (UBP) family of proteases that is a deubiquitinating enzyme (DUB) with His and Cys domains. This protein is located in the cytoplasm and cleaves the ubiquitin moiety from ubiquitin-fused precursors and ubiquitinylated proteins. Mice with a mutation that results in reduced expression of the ortholog of this protein are retarded for growth, develop severe tremors by 2 to 3 weeks of age followed by hindlimb paralysis and death by 6 to 10 weeks of age. Alternate transcriptional splice variants, encoding different isoforms, have been characterized.

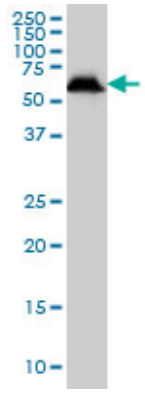
References

New genetic associations detected in a host response study to hepatitis B vaccine. Davila S, et al. Genes Immun, 2010 Apr. PMID 20237496.The proteasome-associated deubiquitinating enzyme Usp14 is essential for the maintenance of synaptic ubiquitin levels and the development of neuromuscular junctions. Chen PC, et al. J Neurosci, 2009 Sep 2. PMID 19726649.Defining the human deubiquitinating enzyme interaction landscape. Sowa ME, et al. Cell, 2009 Jul 23. PMID 19615732.USP14 inhibits ER-associated degradation via interaction with IRE1alpha. Nagai A, et al. Biochem Biophys Res Commun, 2009 Feb 20. PMID 19135427.Deubiquitination of CXCR4 by USP14 is critical for both CXCL12-induced CXCR4 degradation and chemotaxis but not ERK ativation. Mines MA, et al. J Biol Chem, 2009 Feb 27. PMID 19106094.

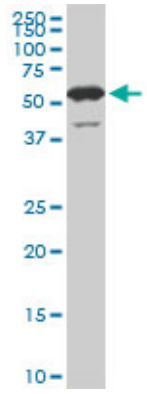
Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (36.74 KDa) .

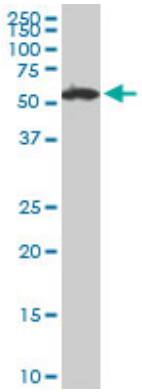


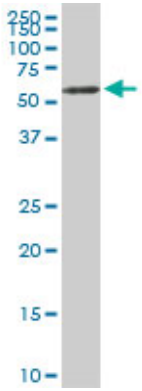
USP14 monoclonal antibody (M04), clone 6D6 Western Blot analysis of USP14 expression in HeLa ((Cat # AT4482a)



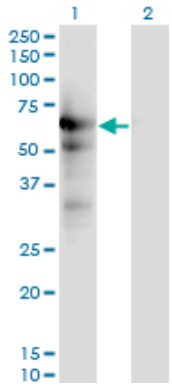
USP14 monoclonal antibody (M04), clone 6D6. Western Blot analysis of USP14 expression in PC-12 ((Cat # AT4482a)

USP14 monoclonal antibody (M04), clone 6D6. Western Blot analysis of USP14 expression in Raw 264.7 ((Cat # AT4482a)



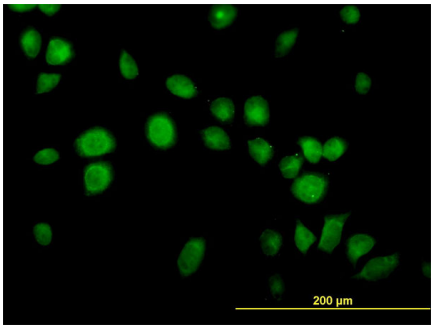


USP14 monoclonal antibody (M04), clone 6D6. Western Blot analysis of USP14 expression in NIH/3T3 ((Cat # AT4482a)

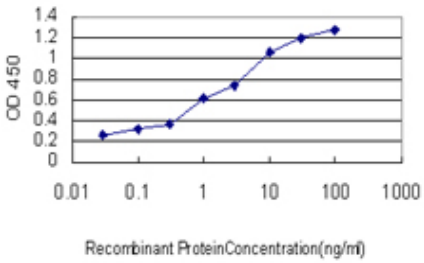


Western Blot analysis of USP14 expression in transfected 293T cell line by USP14 monoclonal antibody (M04), clone 6D6.

Lane 1: USP14 transfected lysate(56.1 KDa).
Lane 2: Non-transfected lysate.



Immunofluorescence of monoclonal antibody to USP14 on HeLa cell. [antibody concentration 20 ug/ml]



Detection limit for recombinant GST tagged USP14 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'.