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USP14 Antibody (monoclonal) (M04)

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

Specification

USP14 Antibody (monoclonal) (M04) - Product Information

Application	**IF, WB, E**
Primary Accession	P54578
Other Accession	NM_005151
Reactivity	**Human, Mouse, Rat**
Host	**mouse**
Clonality	**Monoclonal**
Isotype	**IgG2a Kappa**
Calculated MW	**56069**

USP14 Antibody (monoclonal) (M04) - 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

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.

USP14 Antibody (monoclonal) (M04) - Protocols

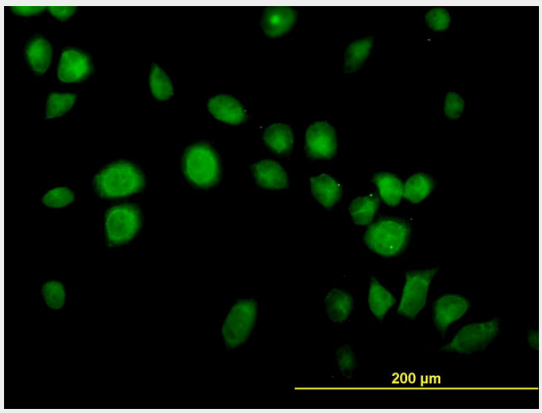
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot

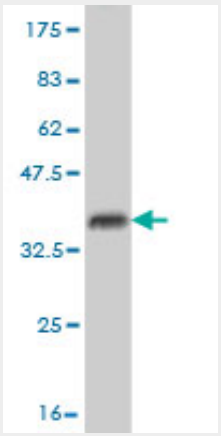
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- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

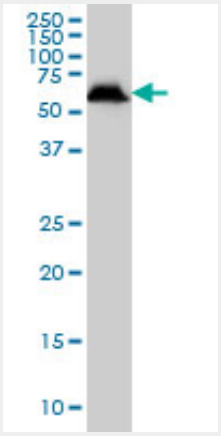
USP14 Antibody (monoclonal) (M04) - Images



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



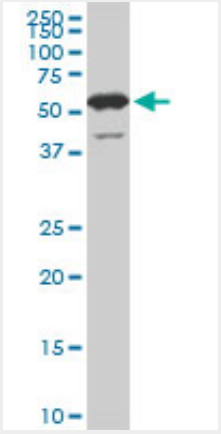
Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (36.74 KDa) .



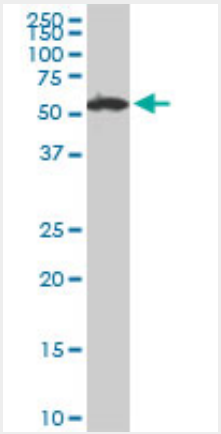
USP14 monoclonal antibody (M04), clone 6D6 Western Blot analysis of USP14 expression in HeLa

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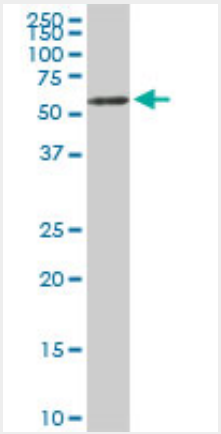
((Cat # AT4482a)



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

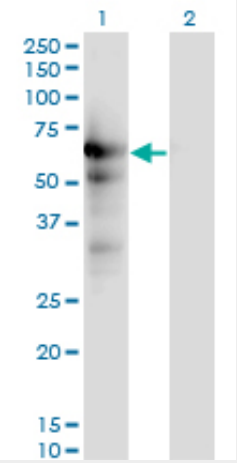


USP14 monoclonal antibody (M04), clone 6D6. Western Blot analysis of USP14 expression in Raw 264.7 ((Cat # AT4482a)



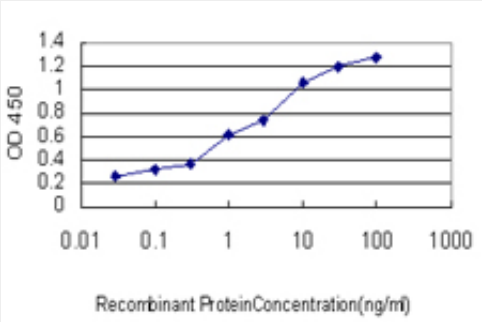
USP14 monoclonal antibody (M04), clone 6D6. Western Blot analysis of USP14 expression in NIH/3T3 ((Cat # AT4482a)

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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.



Detection limit for recombinant GST tagged USP14 is approximately 0.1ng/ml as a capture antibody.

USP14 Antibody (monoclonal) (M04) - 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.

USP14 Antibody (monoclonal) (M04) - 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.