

## USP14 Antibody (monoclonal) (M04)

Mouse monoclonal antibody raised against a partial recombinant USP14.

Catalog # AT4482a

### Specification

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#### USP14 Antibody (monoclonal) (M04) - Product Information

Application	IF, WB, E
Primary Accession	<a href="#">P54578</a>
Other Accession	<a href="#">NM_005151</a>
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.

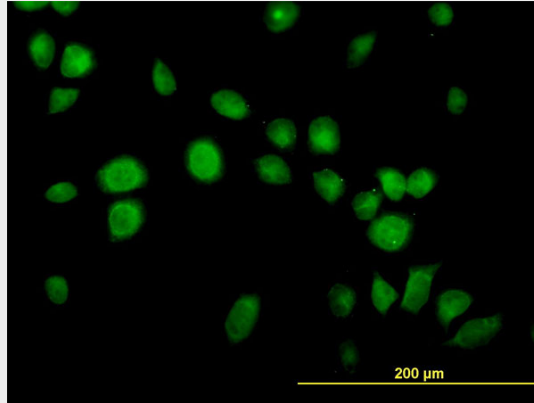
#### USP14 Antibody (monoclonal) (M04) - Protocols

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

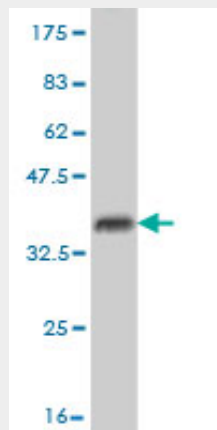
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)

- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

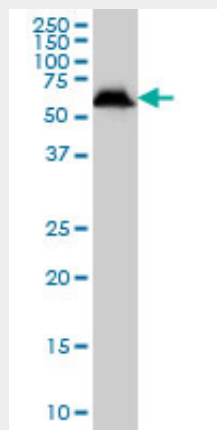
### USP14 Antibody (monoclonal) (M04) - Images



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

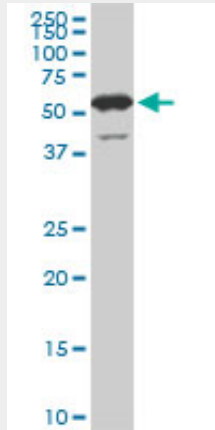


Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (36.74 KDa) .

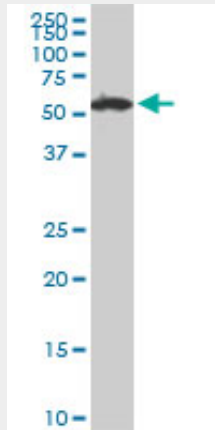


USP14 monoclonal antibody (M04), clone 6D6 Western Blot analysis of USP14 expression in HeLa

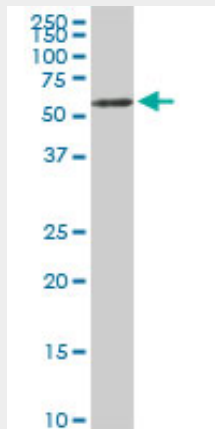
( (Cat # AT4482a )



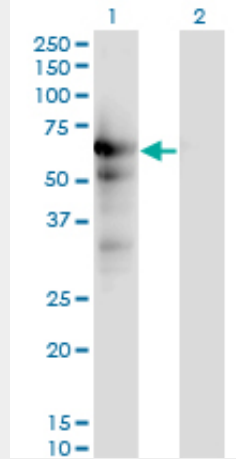
USP14 monoclonal antibody (M04), clone 6D6. Western Blot analysis of USP14 expression in PC-12 ( (Cat # AT4482a )



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

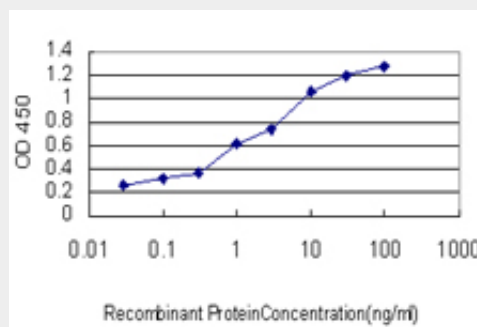


USP14 monoclonal antibody (M04), clone 6D6. Western Blot analysis of USP14 expression in NIH/3T3 ( (Cat # AT4482a )



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.



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 ubiquitylated 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 activation. Mines MA, et al. *J Biol Chem*, 2009 Feb 27. PMID 19106094.