

USP14 Antibody (monoclonal) (M08)

Mouse monoclonal antibody raised against a partial recombinant USP14.

Catalog # AT4483a

Specification

USP14 Antibody (monoclonal) (M08) - Product Information

| | |
|-------------------|---------------------------|
| Application | 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) (M08) - 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) (M08) is for research use only and not for use in diagnostic or therapeutic procedures.

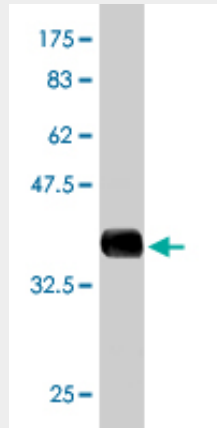
USP14 Antibody (monoclonal) (M08) - Protocols

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

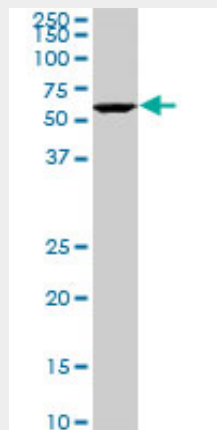
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)

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

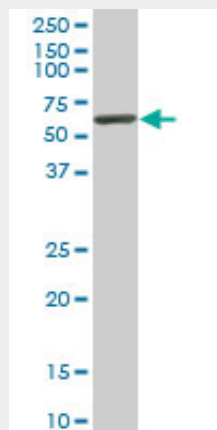
USP14 Antibody (monoclonal) (M08) - Images



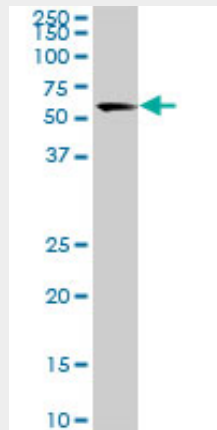
Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (36.74 KDa) .



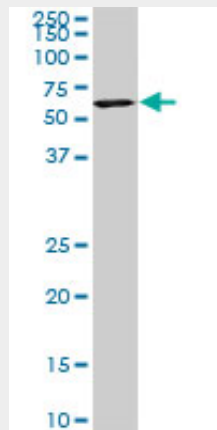
USP14 monoclonal antibody (M08), clone 1F8. Western Blot analysis of USP14 expression in PC-12 ((Cat # AT4483a)



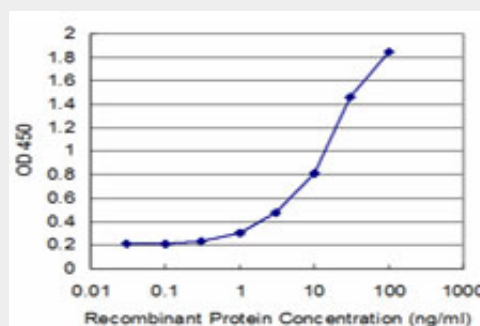
USP14 monoclonal antibody (M08), clone 1F8. Western Blot analysis of USP14 expression in Hela S3 NE ((Cat # AT4483a)



USP14 monoclonal antibody (M08), clone 1F8. Western Blot analysis of USP14 expression in Raw 264.7 ((Cat # AT4483a)



USP14 monoclonal antibody (M08), clone 1F8. Western Blot analysis of USP14 expression in NIH/3T3 ((Cat # AT4483a)



Detection limit for recombinant GST tagged USP14 is approximately 1ng/ml as a capture antibody.

USP14 Antibody (monoclonal) (M08) - 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 ubiquitinated 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) (M08) - 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.