

**USP14 Antibody (N-term)**  
**Mouse Monoclonal Antibody (Mab)**  
**Catalog # AM2220b****Specification**

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**USP14 Antibody (N-term) - Product Information**

|                   |                        |
|-------------------|------------------------|
| Application       | WB,E                   |
| Primary Accession | <a href="#">P54578</a> |
| Reactivity        | Human, Mouse, Rat      |
| Host              | Mouse                  |
| Clonality         | Monoclonal             |
| Isotype           | IgG1                   |

**USP14 Antibody (N-term) - 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**

Purified His-tagged USP14 protein was used to produced this monoclonal antibody.

**Dilution**

WB~~1:1000

E~~Use at an assay dependent concentration.

**Format**

Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

USP14 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**USP14 Antibody (N-term) - Protein Information****Name** USP14**Synonyms** TGT**Function** Proteasome-associated deubiquitinase which releases ubiquitin from the proteasome targeted ubiquitinated proteins (PubMed:[35145029](#)). Ensures the regeneration of ubiquitin at the

proteasome (PubMed:[18162577](#), PubMed:[28396413](#)). Is a reversibly associated subunit of the proteasome and a large fraction of proteasome-free protein exists within the cell (PubMed:[18162577](#)). Required for the degradation of the chemokine receptor CXCR4 which is critical for CXCL12-induced cell chemotaxis (PubMed:[19106094](#)). Also serves as a physiological inhibitor of endoplasmic reticulum-associated degradation (ERAD) under the non-stressed condition by inhibiting the degradation of unfolded endoplasmic reticulum proteins via interaction with ERN1 (PubMed:[19135427](#)). Indispensable for synaptic development and function at neuromuscular junctions (NMJs) (By similarity). Plays a role in the innate immune defense against viruses by stabilizing the viral DNA sensor CGAS and thus inhibiting its autophagic degradation (PubMed:[27666593](#)). Inhibits OPTN-mediated selective autophagic degradation of KDM4D and thereby negatively regulates H3K9me2 and H3K9me3 (PubMed:[35145029](#)).

#### Cellular Location

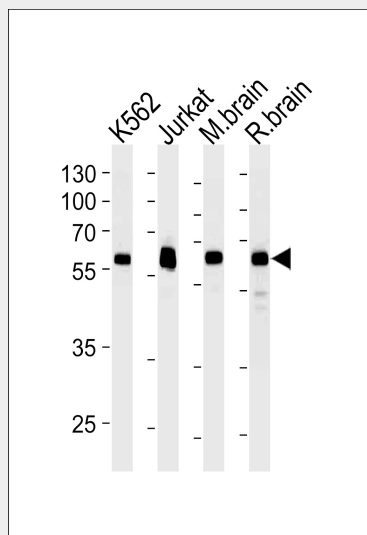
Cytoplasm. Cell membrane; Peripheral membrane protein

#### USP14 Antibody (N-term) - 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 (N-term) - Images



USP14 Antibody (N-term)(Cat. #AM2220b) western blot analysis in k562, Jurkat cell line, mouse brain and rat brain tissue lysates (35µg/lane). This demonstrates the USP14 antibody detected the USP14 protein (arrow).

#### USP14 Antibody (N-term) - Background

Proteasome-associated deubiquitinase which releases ubiquitin from the proteasome targeted

ubiquitinated proteins. Ensures the regeneration of ubiquitin at the proteasome. Is a reversibly associated subunit of the proteasome and a large fraction of proteasome-free protein exists within the cell. Required for the degradation of the chemokine receptor CXCR4 which is critical for CXCL12-induced cell chemotaxis. Serves also as a physiological inhibitor of endoplasmic reticulum-associated degradation (ERAD) under the non-stressed condition by inhibiting the degradation of unfolded endoplasmic reticulum proteins via interaction with ERN1. Indispensable for synaptic development and function at neuromuscular junctions (NMJs).

#### **USP14 Antibody (N-term) - References**

Deshpande K.L., et al. Submitted (AUG-1995) to the EMBL/GenBank/DDBJ databases.  
Kalnine N., et al. Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases.  
Reuter T.Y., et al. Exp. Cell Res. 289:211-221(2003).  
Carrascal M., et al. J. Proteome Res. 7:5167-5176(2008).  
Kouligh E., et al. Mol. Biol. Cell 19:1072-1082(2008).