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

Specification

USP14 Antibody (N-term) - Product Information

Application	**WB,E**
Primary Accession	P54578
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).

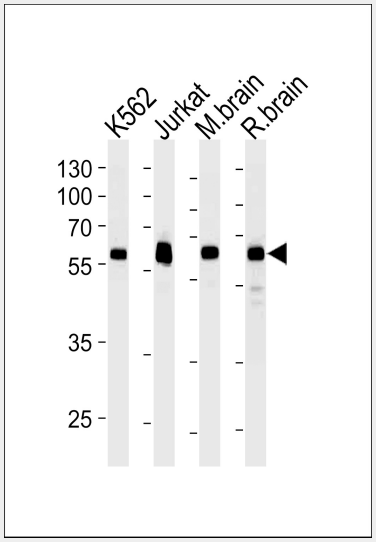
Cellular Location
Cytoplasm. Cell membrane; Peripheral membrane protein

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 Cytomety
- 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).
Koulich E., et al. Mol. Biol. Cell 19:1072-1082(2008).