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USP14 Antibody
Rabbit mAb
Catalog # AP91323

Specification

USP14 Antibody - Product Information

Application	**WB, FC, ICC**
Primary Accession	P54578
Reactivity	**Rat**
Clonality	**Monoclonal**

Other Names
TGT; tRNA guanine transglycosylase 60 kD subunit; Ubiquitin carboxyl terminal hydrolase 14; Ubiquitin specific peptidase 14; USP14;

Isotype	**Rabbit IgG**
Host	**Rabbit**
Calculated MW	**56069 Da**

USP14 Antibody - Additional Information

Purification	**Affinity-chromatography**
Immunogen	**A synthesized peptide derived from human USP14**
Description	**Ubiquitin-Specific Protease 14, which is also known as the 60 kDa subunit of tRNA-guanine transglycosylase (USP14/TGT60 kDa). USP14 is recruited to the proteasome through its reversible association with the PSMD2 (S2/hRPN1) subunit of the 19S regulatory particle. Whereas PSMD14 appears to promote substrate degradation, USP14 is thought to antagonize substrate degradation.**
Storage Condition and Buffer	**Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.**

USP14 Antibody - 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). 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 (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).

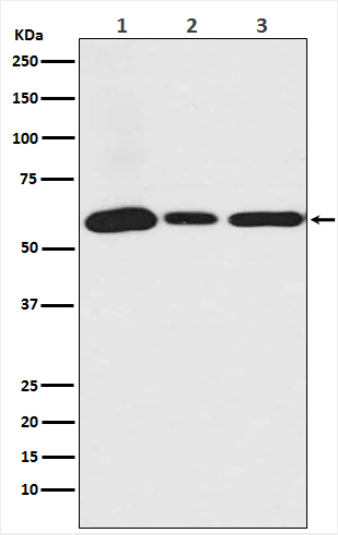
Cellular Location
Cytoplasm. Cell membrane; Peripheral membrane protein

USP14 Antibody - 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 - Images



Western blot analysis of USP14 expression in (1) HeLa cell lysate; (2) RAW 264.7 cell lysate; (3)

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C6 cell lysate.