

USP14 Antibody

Rabbit mAb Catalog # AP91323

Specification

USP14 Antibody - Product Information

Application WB, FC, ICC
Primary Accession P54578
Reactivity Rat
Classity Management

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

Dilution WB~~1:1000

FC~~1:10~50 ICC~~N/A

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-quanine 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.

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

Storage Condition and Buffer

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

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

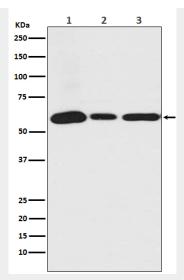
USP14 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- 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) C6 cell lysate.