

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](http://www.uniprot.org/citations/18162577)), PubMed: [28396413](http://www.uniprot.org/citations/28396413)). Is a reversibly associated subunit of the proteasome and a large fraction of proteasome-free protein exists within the cell (PubMed: [18162577](http://www.uniprot.org/citations/18162577)). Required for the degradation of the chemokine receptor CXCR4 which is critical for CXCL12-induced cell chemotaxis (PubMed: [19106094](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/27666593)). Inhibits OPTN-mediated selective autophagic degradation of KDM4D and thereby negatively regulates H3K9me2 and H3K9me3 (PubMed: [35145029](http://www.uniprot.org/citations/35145029)).

Cellular Location

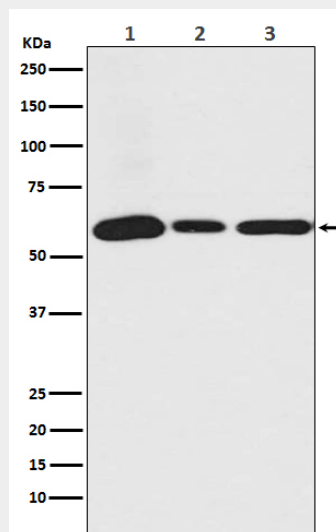
Cytoplasm. Cell membrane; Peripheral membrane protein

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 Cytometry](#)
- [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.