10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

USP14 Antibody

Rabbit mAb
Catalog # AP91323

Product Information

Application	WB, IF, FC, ICC
Primary Accession	P54578
Reactivity	Rat, Human, Mouse
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

Additional Information

Dilution	WB 1:500~1:2000 ICC/IF 1:50~1:200 FC 1:60
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.

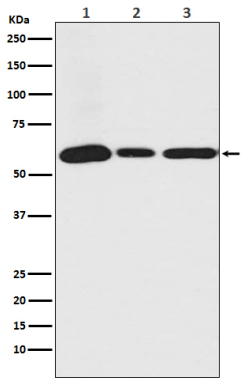
Protein Information

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

Images



Western blot analysis of USP14 expression in (1) HeLa cell lysate; (2) RAW 264.7 cell lysate; (3) C6 cell lysate.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.