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KD-Validated Anti-Ubiquitin Specific Peptidase 14 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI1710

Specification

KD-Validated Anti-Ubiquitin Specific Peptidase 14 Rabbit Monoclonal Antibody - Product Information

Application	**WB, FC, ICC**
Primary Accession	P54578
Reactivity	**Rat, Human, Mouse**
Clonality	**Monoclonal**
Isotype	**Rabbit IgG**
Calculated MW	**Predicted, 56 kDa , observed , 56 kDa KDa**
Gene Name	**USP14**
Aliases	**USP14; Ubiquitin Specific Peptidase 14; TGT; Ubp6; Ubiquitin Specific Peptidase 14 (TRNA-Guanine Transglycosylase); Ubiquitin Specific Protease 14 (TRNA-Guanine Transglycosylase); Ubiquitin Carboxyl-Terminal Hydrolase 14; Deubiquitinating Enzyme 14; Ubiquitin Thioesterase 14; TRNA-Guanine Transglycosylase, 60-KD Subunit; Ubiquitin-Specific Processing Protease 14; Ubiquitin-Specific-Processing Protease 14; Ubiquitin Thiolesterase 14; EC 3.4.19.12; EC 3.1.2.15**
Immunogen	**A synthesized peptide derived from human USP14**

KD-Validated Anti-Ubiquitin Specific Peptidase 14 Rabbit Monoclonal Antibody - Additional Information

Gene ID	**9097**

Other Names
Ubiquitin carboxyl-terminal hydrolase 14, 3.4.19.12, Deubiquitinating enzyme 14, Ubiquitin thioesterase 14, Ubiquitin-specific-processing protease 14, USP14, TGT

KD-Validated Anti-Ubiquitin Specific Peptidase 14 Rabbit Monoclonal Antibody - Protein Information

Name USP14

Synonyms TGT

Function
Proteasome-associated deubiquitinase which releases ubiquitin from the proteasome targeted ubiquitinated proteins (PubMed:<a href="http://www.uniprot.org/citations/35145029"

target="_blank">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).

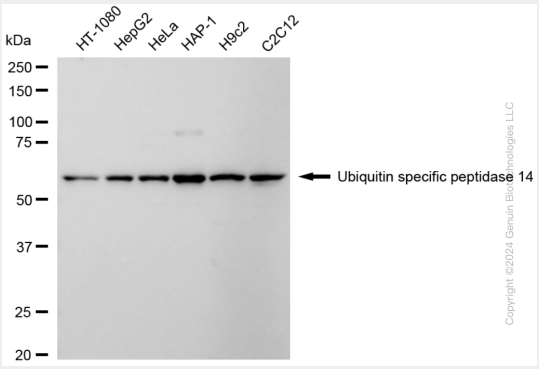
Cellular Location
Cytoplasm. Cell membrane; Peripheral membrane protein

KD-Validated Anti-Ubiquitin Specific Peptidase 14 Rabbit Monoclonal 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

KD-Validated Anti-Ubiquitin Specific Peptidase 14 Rabbit Monoclonal Antibody - Images



Western blotting analysis using anti-ubiquitin specific peptidase 14 antibody (Cat#AGI1710). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-ubiquitin specific peptidase 14 antibody (Cat#AGI1710, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.

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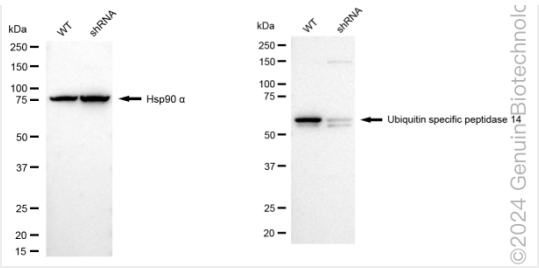
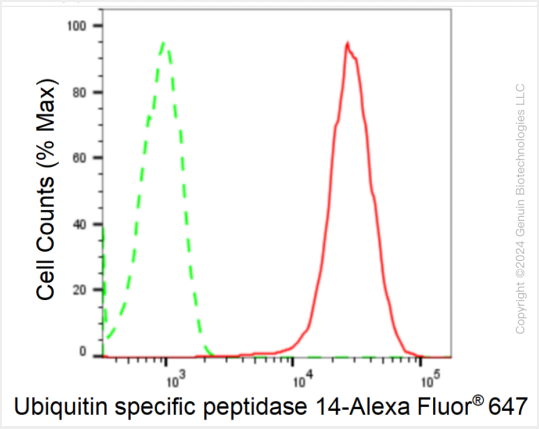
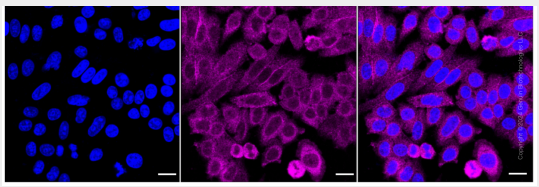


Western blotting analysis using anti-Ubiquitin specific peptidase 14 antibody (Cat#AGI1710). Ubiquitin specific peptidase 14 expression in wild type (WT) and Ubiquitin specific peptidase 14 shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-Ubiquitin specific peptidase 14 antibody (Cat#AGI1710, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of Ubiquitin specific peptidase 14 expression in HepG2 cells using anti-Ubiquitin specific peptidase 14 antibody (Cat#AGI1710, 1:2,000). Green, isotype control; red, Ubiquitin specific peptidase 14.



Immunocytochemical staining of HepG2 cells with anti-Ubiquitin specific peptidase 14 antibody (Cat#AGI1710, 1:1,000). Nuclei were stained blue with DAPI; Ubiquitin specific peptidase 14 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 µm.