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

Rabbit monoclonal antibody
Catalog # AGI1710

Product Information

Application	WB, FC, ICC
Primary Accession	P54578
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Names	24GB2190
Calculated MW	56069
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

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

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

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