

**USP12 Antibody (Center)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP14945c**

**Specification**

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**USP12 Antibody (Center) - Product Information**

Application	WB,E
Primary Accession	<a href="#">O75317</a>
Other Accession	<a href="#">Q9D9M2</a> , <a href="#">A5D9H7</a> , <a href="#">Q5M981</a> , <a href="#">Q52KZ6</a> , <a href="#">NP_872294.2</a>
Reactivity	Mouse
Predicted	Xenopus, Bovine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	42858
Antigen Region	222-251

**USP12 Antibody (Center) - Additional Information**

**Gene ID** 219333

**Other Names**

Ubiquitin carboxyl-terminal hydrolase 12, Deubiquitinating enzyme 12, Ubiquitin thioesterase 12, Ubiquitin-hydrolyzing enzyme 1, Ubiquitin-specific-processing protease 12, USP12, UBH1, USP12L1

**Target/Specificity**

This USP12 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 222-251 amino acids from the Central region of human USP12.

**Dilution**

WB~~1:1000

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

USP12 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

**USP12 Antibody (Center) - Protein Information**

**Name** USP12

**Synonyms** UBH1, USP12L1

**Function** Deubiquitinating enzyme that plays various roles in the regulation of the immune response and inflammation (PubMed:[19075014](#), PubMed:[27373336](#)). In complex with WDR48, acts as a potential tumor suppressor by positively regulating PHLPP1 stability (PubMed:[24145035](#)). During TCR engagement and activation, translocates into the cytoplasm and deubiquitinates its substrates LAT and TRAF1 and prevents their lysosome-dependent degradation to stabilize the TCR signaling complex at the plasma membrane (PubMed:[26811477](#)). Plays an essential role in the selective LPS-induced macrophage response through the activation of NF-kappa-B pathway (PubMed:[28063927](#)). In addition, promotes that antiviral immune response through targeting DNA sensor IFI16 to inhibit its proteasome-dependent degradation (PubMed:[37410794](#)). Participates in the interferon signaling pathway and antiviral response independently of its deubiquitinase activity by maintaining nuclear phosphorylated STAT1 levels via inhibition of its CREBBP-mediated acetylation and subsequent dephosphorylation (PubMed:[31899788](#)). Plays an intrinsic role in promoting the differentiation, activation and proliferation of CD4(+) T-cell by activating the NF-kappa-B signaling pathway through deubiquitinating and stabilizing B-cell lymphoma/leukemia 10/BCL10 (By similarity). In myeloid-derived suppressor cells promotes the activation of the NF-kappa-B via deubiquitination and stabilization of RELA (By similarity). Regulates the 'Lys-63'-linked polyubiquitin chains of BAX and thereby modulates the mitochondrial apoptotic process (PubMed:[36361894](#)).

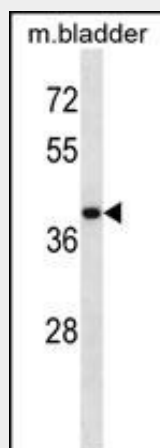
**Cellular Location**

Nucleus. Cytoplasm. Cell membrane. Note=Translocates from the nucleus to the cytosol on TCR stimulation, while it translocates into the nucleus in IFN signaling. USP12/WDR20/WDR48 complex is localized mainly to the plasma membrane (PubMed:30466959).

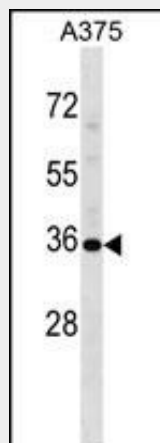
**USP12 Antibody (Center) - Protocols**

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](#)

**USP12 Antibody (Center) - Images**

USP12 Antibody (Center) (Cat. #AP14945c) western blot analysis in mouse bladder tissue lysates (35ug/lane). This demonstrates the USP12 antibody detected the USP12 protein (arrow).



USP12 Antibody (Center) (Cat. #AP14945c) western blot analysis in A375 cell line lysates (35ug/lane). This demonstrates the USP12 antibody detected the USP12 protein (arrow).

#### **USP12 Antibody (Center) - Background**

USP12 is a deubiquitinating enzyme. Has almost no deubiquitinating activity by itself and requires the interaction with WDR48 to have a high activity. Not involved in deubiquitination of monoubiquitinated FANCD2.

#### **USP12 Antibody (Center) - References**

Kee, Y., et al. J. Biol. Chem. 285(15):11252-11257(2010)  
Asano, K., et al. Nat. Genet. 41(12):1325-1329(2009)  
Cohn, M.A., et al. J. Biol. Chem. 284(8):5343-5351(2009)  
Dunham, A., et al. Nature 428(6982):522-528(2004)  
Puente, X.S., et al. Nat. Rev. Genet. 4(7):544-558(2003)