

**USP12 Antibody (Center) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP14945c****Specification**

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**USP12 Antibody (Center) Blocking Peptide - Product Information**Primary Accession [O75317](#)**USP12 Antibody (Center) Blocking Peptide - 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

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**USP12 Antibody (Center) Blocking Peptide - Protein Information****Name** USP12**Synonyms** UBH1, USP12L1**Function**

Deubiquitinating enzyme that plays various roles in the regulation of the immune response and inflammation (PubMed:<a href="http://www.uniprot.org/citations/19075014" target="\_blank">19075014</a>, PubMed:<a href="http://www.uniprot.org/citations/27373336" target="\_blank">27373336</a>). In complex with WDR48, acts as a potential tumor suppressor by positively regulating PHLPP1 stability (PubMed:<a href="http://www.uniprot.org/citations/24145035" target="\_blank">24145035</a>). 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:<a href="http://www.uniprot.org/citations/26811477" target="\_blank">26811477</a>). Plays an essential role in the selective LPS-induced macrophage response through the activation of NF-kappa-B pathway (PubMed:<a href="http://www.uniprot.org/citations/28063927" target="\_blank">28063927</a>). In addition, promotes that antiviral immune response through targeting DNA sensor IFI16 to inhibit its proteasome-dependent degradation (PubMed:<a href="http://www.uniprot.org/citations/37410794" target="\_blank">37410794</a>). 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:<a href="http://www.uniprot.org/citations/31899788" target="\_blank">31899788</a>). 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:<a href="http://www.uniprot.org/citations/36361894" target="\_blank">36361894</a>).

#### **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) Blocking Peptide - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

### **USP12 Antibody (Center) Blocking Peptide - Images**

### **USP12 Antibody (Center) Blocking Peptide - 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) Blocking Peptide - 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)