

USP12 Antibody (Center) Blocking Peptide

Synthetic peptide Catalog # BP14945c

Specification

USP12 Antibody (Center) Blocking Peptide - Product Information

Primary Accession

075317

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

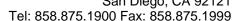
Name USP12

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, 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 TRAT1 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) 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

USP12is 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)