

Datasheet for ABIN7545017
USP12 Protein (AA 1-370) (His tag)



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Overview

Quantity:	1 mg
Target:	USP12
Protein Characteristics:	AA 1-370
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This USP12 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant USP12 Protein expressed in mammalian cells.
Sequence:	MEILMTVSKF ASICTMGANA SALEKEIGPE QFPVNEHYFG LVNFGNTCYC NSVLQALYFC RPFREKVLAY KSQPRKESL LTCLADLFHS IATQKKKGV IPPKKFITRL RKENELFDNY MQQDAHEFLN YLLNTIADIL QEERKQEKQN GRLPNGNIDN ENNSTPDPT WVHEIFQGTL TNETRCLTCE TISSKDEDFL DLSVDVEQNT SITHCLRGFS NTETLCSEYK YYCEECSKQ EAHKRMKVKK LPMILALHLK RFKYMDQLHR YTKLSYRVVF PLELRLFNTS GDATNPDRMY DLVAVVHCG SGPNRGHYIA IVKSHDFWLL FDDDIVEKID AQAIEEFYGL TSDISKNSES GYILFYQSRD Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.
Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different isoform, please contact us regarding an individual offer.
Characteristics:	Key Benefits:

Product Details

- Made to order protein - from design to production - by highly experienced protein experts.
- Protein expressed in mammalian cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

If you are not interested in a full length protein, please contact us for individual protein fragments.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

Purity:	> 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)
Grade:	custom-made

Target Details

Target:	USP12
Alternative Name:	USP12 (USP12 Products)
Background:	Ubiquitin carboxyl-terminal hydrolase 12 (EC 3.4.19.12) (Deubiquitinating enzyme 12) (Ubiquitin thioesterase 12) (Ubiquitin-hydrolyzing enzyme 1) (Ubiquitin-specific-processing protease 12),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 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

Target Details

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). {ECO:0000250|UniProtKB:Q9D9M2, ECO:0000269|PubMed:19075014, ECO:0000269|PubMed:24145035, ECO:0000269|PubMed:26811477, ECO:0000269|PubMed:27373336, ECO:0000269|PubMed:28063927, ECO:0000269|PubMed:31899788, ECO:0000269|PubMed:36361894, ECO:0000269|PubMed:37410794}., FUNCTION: (Microbial infection) Forms a complex with Epstein-Barr virus protein EBNA3 which is an active deubiquitinase activity that may select specific substrates to promote B-lymphocyte transformation. {ECO:0000269|PubMed:25855980}.

Molecular Weight: 42.9 kDa

UniProt: [O75317](#)

Application Details

Application Notes: We expect the protein to work for functional studies. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: The buffer composition is at the discretion of the manufacturer.

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: 12 months