

Datasheet for ABIN3096215
USP15 Protein (AA 2-981) (His tag)



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1 Image

Overview

Quantity:	1 mg
Target:	USP15
Protein Characteristics:	AA 2-981
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This USP15 protein is labelled with His tag.
Application:	SDS-PAGE (SDS), ELISA, Western Blotting (WB), Crystallization (Crys)

Product Details

Sequence:	<p>AEGGAADLDT QRSDIATLLK TSLRKGDTWY LVDSRWFKQW KKYVGFDSWD KYQMGDQNVY PGPIDNSGLL KGDGAQSLKE HLIDELDYIL LPTEGWNKLV SWYTLMEGQE PIARKVVEQG MFVKHKCKVEV YLTELKLCEN GNMNNVTRR FSKADTIDTI EKEIRKIFSI PDEKETRLWN KYMSNTFEPL NKPDESTIQDA GLYQGQVLVI EQKNEDGTWP RGPSTPKSPG ASNFSTLPKI SPSSLSNNYN NMNNRNVKNS NYCLPSYTAY KNYDYSEPGR NNEQPGLCGL SNLGNTCFMN SAIQCLSNTP PLTEYFLNDK YQEELNFDNP LGMRGEIAKS YAEAIKQMWS GKFSYVTPRA FKTQVGRFAP QFSGYQQQDC QELLAFLLDG LHEDLNRIRK KPYIQLKDAC GRPDKVVAEE AWENHLKRND SIIVDIFHGL FKSTLVCPEC AKISVTFDPF CYLTLPLPMK KERTLEVYLV RMDPLTKPMQ YKVVVVKIGN ILDLCTALSA LSGIPADKMI VTDIYNHRFH RIFAMDENLS SIMERDDIYV FEININRTED TEHVIPVCL REKFRHSSYT HHTGSSLFGQ PFLMAVPRNN TEDKLYNLLL LRMCRYVKIS TETEETEGSL HCCKDQNING NGPNGIHEEG SPSEMETDEP DDESSQDQEL PSENENSQSE DSVGGDNDSE NGLCTEDTCK GQLTGHHKRL FTFQFNLLGN</p>
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TDINYIKDDT RHIRFDDRQL RLDERSFLAL DWDPDLKKRY FDENAAEDFE KHESVEYKPP
KKPFVKLKDC IELFTTKEKL GAEDPWYCPN CKEHQQATKK LDLWSLPPVL VVHLKRFSYS
RYMRDKLDTL VDFPINDLDM SEFLINPNAG PCRYNLIASV NHYGGMGGGH YTAFAKNKDD
GKWYFDDSS VSTASEQIV SKAAYVLFYQ RQDTFSGTGF FPLDRETKGA SAATGIPLES
DEDSNDNDND IENENCMHTN

Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.

Characteristics:

- Made in Germany - from design to production - by highly experienced protein experts.
- Human USP15 Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade.
- 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 will ensure that you receive a correctly folded protein.

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.

In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization).

When you order this made-to-order protein you will only pay upon receipt of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered.

The concentration of our recombinant proteins is measured using the absorbance at 280nm.

The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer.

The concentration of the protein is calculated using its specific absorption coefficient. We use the ExPASy's ProtParam tool to determine the absorption coefficient of each protein.

Purification:

Two step purification of proteins expressed in baculovirus infected SF9 insect cells:

1. In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. Eluate fractions are analyzed by SDS-PAGE.
2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.

Product Details

Purity:	>95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Sterility:	0.22 µm filtered
Endotoxin Level:	Protein is endotoxin free.
Grade:	Crystallography grade

Target Details

Target:	USP15
Alternative Name:	USP15 (USP15 Products)
Background:	<p>Hydrolase that removes conjugated ubiquitin from target proteins and regulates various pathways such as the TGF-beta receptor signaling and NF-kappa-B pathways. Acts as a key regulator of TGF-beta receptor signaling pathway, but the precise mechanism is still unclear: according to a report, acts by promoting deubiquitination of monoubiquitinated R-SMADs (SMAD1, SMAD2 and/or SMAD3), thereby alleviating inhibition of R-SMADs and promoting activation of TGF-beta target genes (PubMed:21947082). According to another reports, regulates the TGF-beta receptor signaling pathway by mediating deubiquitination and stabilization of TGFBR1, leading to an enhanced TGF-beta signal (PubMed:22344298). Able to mediate deubiquitination of monoubiquitinated substrates as well as 'Lys-48'-linked polyubiquitin chains, protecting them against proteasomal degradation. May also regulate gene expression and/or DNA repair through the deubiquitination of histone H2B (PubMed:24526689). Acts as an associated component of COP9 signalosome complex (CSN) and regulates different pathways via this association: regulates NF-kappa-B by mediating deubiquitination of NFKBIA and deubiquitinates substrates bound to VCP. Protects APC and human papillomavirus type 16 protein E6 against degradation via the ubiquitin proteasome pathway.</p> <p>{ECO:0000269 PubMed:16005295, ECO:0000269 PubMed:17318178, ECO:0000269 PubMed:19553310, ECO:0000269 PubMed:19576224, ECO:0000269 PubMed:19826004, ECO:0000269 PubMed:21947082, ECO:0000269 PubMed:22344298, ECO:0000269 PubMed:24526689}.</p>
Molecular Weight:	113.2 kDa Including tag.
UniProt:	Q9Y4E8

Application Details

Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies
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Application Details

as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Comment: In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you receive your protein of interest.

Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: 100 mM NaCl, 20 mM Hepes, 10% glycerol. pH value 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: Unlimited (if stored properly)

Images



Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process