

Datasheet for ABIN3096195
USP33 Protein (AA 1-942) (His tag)[Go to Product page](#)

1 Image

Overview

Quantity:	1 mg
Target:	USP33
Protein Characteristics:	AA 1-942
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This USP33 protein is labelled with His tag.
Application:	ELISA, Western Blotting (WB), Crystallization (Crys), SDS-PAGE (SDS)

Product Details

Sequence:	MTGSNSHITI LTLKVLPHFE SLGKQEKIPN KMSAFRNHCP HLDSVGEITK EDLIQKSLGT CQDCKVQGPN LWACLENRCS YVGCGESQVD HSTIHSQETK HYLTVNLTTL RVWCYACSK VFLDRKLGTTQ PSLPHVRQPH QIQENSVDQF KIPSNTTLKT PLVAVFDDLD IEADEEDEL ARGLTGLKNI GNTCYMNAAL QALSNCPLT QFFLDCGGLA RTDKKPAICK SYLKLMTLW HKSRPGSVVP TTLFQGIKT V NPTFRGYSQQ DAQEFRLCLM DLLHEELKEQ VMEVEEDPQT ITTEETMEED KSQSDVDFQS CESCNSNDRA ENENGSRCS EDNNETTMLI QDDENNSEMS KDWQKEKMCN KINKVNSEGE FDKDRDSISE TVDLNNQETV KVQIHSRASE YITDVHSNDL STPQILPSNE GVNPRLSASP PKSGNLWPGL APPHKKAQSA SPKRKKQHKK YRSVISDIFD GTIISVQCL TCDRVSVTLE TFQDLSPIP GKEDLAKLHS SSHPTSIVKA GSCGEAYAPQ GWIAFFMEYV KRFVWSCVPS WFWGPVVTQ DCLAAFFARD ELKGDNMYSC EKCKKLNRGV KFCKVQNFPE ILCIHLKRFR HELMFSTKIS THVSFPLEGL DLQPFLAKDS PAQIVTYDLL SVICHHTAS SGHYIAYCRN NLNNLWYEFD DQSVTEVSES TVQNAEAYVL FYRKSSEEAQ
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KERRRISNLL NIMEPSLLQF YISRQWLNKF KTFAEPGPIS NNDFLCIHGG VPPRKAGYIE
DLVLMLPQNI WDNLYSRYGG GPAVNHLIYC HTCQIEAEKI EKRRKTELEI FIRLNRAFQK
EDSPATFYCI SMQWFREWES FVKGKGDGDP GPIDNTKIAV TKCGNVMLRQ GADSGQISEE
TWNFLQSIYG GGPEVILRPP VHVDPDILQ AEEKIEVETR SL

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 USP33 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.

Purity:

>95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.

Product Details

Sterility:	0.22 µm filtered
Endotoxin Level:	Protein is endotoxin free.
Grade:	Crystallography grade

Target Details

Target:	USP33
Alternative Name:	USP33 (USP33 Products)
Background:	<p>Deubiquitinating enzyme involved in various processes such as centrosome duplication, cellular migration and beta-2 adrenergic receptor/ADRB2 recycling. Involved in regulation of centrosome duplication by mediating deubiquitination of CCP110 in S and G2/M phase, leading to stabilize CCP110 during the period which centrioles duplicate and elongate. Involved in cell migration via its interaction with intracellular domain of ROBO1, leading to regulate the Slit signaling. Plays a role in commissural axon guidance cross the ventral midline of the neural tube in a Slit-dependent manner, possibly by mediating the deubiquitination of ROBO1. Acts as a regulator of G-protein coupled receptor (GPCR) signaling by mediating the deubiquitination of beta-arrestins (ARRB1 and ARRB2) and beta-2 adrenergic receptor (ADRB2). Plays a central role in ADRB2 recycling and resensitization after prolonged agonist stimulation by constitutively binding ADRB2, mediating deubiquitination of ADRB2 and inhibiting lysosomal trafficking of ADRB2. Upon dissociation, it is probably transferred to the translocated beta-arrestins, leading to beta-arrestins deubiquitination and disengagement from ADRB2. This suggests the existence of a dynamic exchange between the ADRB2 and beta-arrestins. Deubiquitinates DIO2, thereby regulating thyroid hormone regulation. Mediates deubiquitination of both 'Lys-48'- and 'Lys-63'-linked polyubiquitin chains. {ECO:0000269 PubMed:12865408, ECO:0000269 PubMed:19363159, ECO:0000269 PubMed:19424180, ECO:0000269 PubMed:23486064}.</p>
Molecular Weight:	107.7 kDa Including tag.
UniProt:	Q8TEY7
Pathways:	Regulation of G-Protein Coupled Receptor Protein Signaling

Application Details

Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee
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Application Details

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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