Datasheet for ABIN3096275

UVRAG Protein (AA 1-699) (His tag)

1 Image

Go to Product page

Overview

Quantity:	1 mg
Target:	UVRAG
Protein Characteristics:	AA 1-699
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This UVRAG protein is labelled with His tag.
Application:	ELISA, Western Blotting (WB), Crystallization (Crys), SDS-PAGE (SDS)

Product Details

Sequence:	MSASASVGGP VPQPPPGPAA ALPPGSAARA LHVELPSQQR RLRHLRNIAA RNIVNRNGHQ LLDTYFTLHL CSTEKIYKEF YRSEVIKNSL NPTWRSLDFG IMPDRLDTSV SCFVVKIWGG KENIYQLLIE WKVCLDGLKY LGQQIHARNQ NEIIFGLNDG YYGAPFEHKG YSNAQKTILL QVDQNCVRNS YDVFSLLRLH RAQCAIKQTQ VTVQKIGKEI EEKLRLTSTS NELKKKSECL QLKILVLQNE LERQKKALGR EVALLHKQQI ALQDKGSAFS AEHLKLQLQK ESLNELRKEC TAKRELFLKT NAQLTIRCRQ LLSELSYIYP IDLNEHKDYF VCGVKLPNSE DFQAKDDGSI AVALGYTAHL VSMISFFLQV PLRYPIIHKG SRSTIKDNIN DKLTEKEREF PLYPKGGEKL QFDYGVYLLN KNIAQLRYQH GLGTPDLRQT LPNLKNFMEH GLMVRCDRHH TSSAIPVPKR QSSIFGGADV GFSGGIPSPD KGHRKRASSE NERLQYKTPP PSYNSALAQP VTTVPSMGET ERKITSLSSS LDTSLDFSKE NKKKGEDLVG SLNGGHANVH PSQEQGEALS GHRATVNGTL LPSEQAGSAS VQLPGEFHPV SEAELCCTVE QAEEIIGLEA TGFASGDQLE AFNCIPVDSA VAVECDEQVL GEFEEFSRRI YALNENVSSF RRPRRSSDK

Product Details

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

Target Details

Target:	UVRAG
Alternative Name:	UVRAG (UVRAG Products)
Background:	Versatile protein that is involved in regulation of differenent cellular pathways implicated in membrane trafficking. Involved in regulation of the COPI-dependent retrograde transport from Golgi and the endoplasmic reticulum by associating with the NRZ complex, the function is dependent on its binding to phosphatidylinositol 3-phosphate (PtdIns(3)P) (PubMed:24056303). During autophagy acts as regulatory subunit of the alternative PI3K complex II (PI3KC3-C2) that mediates formation of phosphatidylinositol 3-phosphate and is believed to be involved in maturation of autophagosomes and endocytosis. Activates lipid kinase activity of PIK3C3. Involved in the regulation of degradative endocytic trafficking and cytokinesis, and in regulation of ATG9A transport from the Golgi to the autophagosome, the functions seems to implicate its association with PI3KC3-C2 (PubMed:16799551, PubMed:20643123, PubMed:24056303). Involved in maturation of autophagosomes and degradative endocytic trafficking independently of BECN1 but depending on its association with a class C Vps complex (possibly the HOPS complex), the association is also proposed to promote autophagosome recruitment and activation of Rab7 and endosome-endosome fusion events (PubMed:18552835). Enhances class C Vps complex (possibly HOPS complex) association with a SNARE complex and promotes fusogenic SNARE complex formation during late endocytic membrane fusion (PubMed:24550300). In case of negative-strand RNA virus infection is required for efficient virus entry, promotes endocytic transport of virions and is implicated in a VAMP8-specific fusogenic SNARE complex assembly (PubMed:24550300). {ECO:0000269|PubMed:18552835, ECO:0000269|PubMed:20643123, ECO:0000269|PubMed:24056303, ECO:0000305}., Involved in maintaining chromosomal stability. Promotes DNA double-strand break (DSB) repair by association with DNA-dependent protein kinase complex DNA-PK and activating it in non-homologous end joining (NHEJ) (PubMed:22542840). Required for centrosome stability and proper chromosome segregation (PubMed:22542840). {ECO:0000269|PubMed:22542840}.
Molecular Weight:	79.1 kDa Including tag.
UniProt:	Q9P2Y5

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 gurantee though.

Application Details

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