

Datasheet for ABIN3096275

## UVRAG Protein (AA 1-699) (Strep Tag)



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### Overview

Quantity:	250 µg
Target:	UVRAG
Protein Characteristics:	AA 1-699
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This UVRAG protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

### Product Details

Brand:	AliCE®
Sequence:	<p>MSASASVGGP VPQPPPGPAA ALPPGSAARA LHVELPSQQR RLRHLRNIAA RNIVNRNGHQ</p> <p>LLDTYFTLHL CSTEKIYKEF YRSEVIKNSL NPTWRS�DFG IMPDRLDTSV SCFVVKIWGG</p> <p>KENIYQLLIE WKVCLDGLKY LGQQIHARNQ NEIIFGLNDG YYGAPFEHKG YSNAQKTILL</p> <p>QVDQNCVRNS YDVFSLLRLH RAQCAIKQTQ VTVQKIGKEI EEKLRLTSTS NELKKKSECL</p> <p>QLKILVLQNE LERQKKALGR EVALLHKQOI ALQDKGSAFS AEHLKLQLQK ESLNELRKEC</p> <p>TAKRELFLKT NAQLTIRCRQ LLSSELSYIYP IDLNEHKDYF VCGVKLPNSE DFQAKDDGSI</p> <p>AVALGYTAHL VSMISFFLQV PLRYPIIHKG SRSTIKDNIN DKLTEKEREK PLYPKGGEKL</p> <p>QFDYGVYLLN KNIAQLRYQH GLGTPDLRQT LPNLKNFMEH GLMVRCDRHH TSSAIPVPKR</p> <p>QSSIFGGADV GFSGGIPSPD KGHRKRASSE NERLQYKTPP PSYNSALAQP VTTVPSMGET</p> <p>ERKITSLSSS LDTSLDFSKE NKKKGEDLVG SLNGGHANVH PSQEQGEALS GHRATVNGTL</p> <p>LPSEQAGSAS VQLPGEFHPV SEAELCCTVE QAEEIIGLEA TGFASGDQLE AFNCIPVDSA</p>

VAVECDEQVL GEFEEFSRRI YALNENVSSF RRPRRSSDK

**Sequence without tag. The proposed Strep-Tag is based on experience s 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.**

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### Characteristics:

#### Key Benefits:

- Made in Germany - from design to production - by highly experienced protein experts.
- Protein expressed with ALiCE® and purified in one-step affinity chromatography
- These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed).
- 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.

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.

#### Expression System:

- ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from *Nicotiana tabacum* c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.
- During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!

#### Concentration:

- The concentration of our recombinant proteins is measured using the absorbance at 280nm.
- The protein's absorbance will be measured against its specific reference buffer.
- We use the ExPASy's ProtParam tool to determine the absorption coefficient of each protein.

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### Purification:

One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®).

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## Product Details

Purity: > 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).

Grade: custom-made

## Target Details

Target: UVRAG

Alternative Name: UVRAG ([UVRAG Products](#))

Background: UV radiation resistance-associated gene protein (p63),FUNCTION: Versatile protein that is involved in regulation of different 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:16799551, PubMed:18552835, PubMed:20643123, PubMed:24056303, PubMed:28306502). During autophagy acts as a 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 (PubMed:16799551, PubMed:20643123, PubMed:24056303, PubMed:28306502). 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, PubMed:28306502). 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:0000269|PubMed:28306502, ECO:0000305}., FUNCTION: 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).

## Target Details

{ECO:0000269|PubMed:22542840}.

Molecular Weight: 78.2 kDa

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 guarantee though.

Comment: ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from *Nicotiana tabacum* c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.

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Restrictions: For Research Use only

## Handling

Format: Liquid

Buffer: The buffer composition is at the discretion of the manufacturer.  
Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol **Might differ depending on protein.**

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: 12 months