

Datasheet for ABIN3096230

## USP1 Protein (AA 1-785) (Strep Tag)



[Go to Product page](#)

### Overview

Quantity:	250 µg
Target:	USP1
Protein Characteristics:	AA 1-785
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This USP1 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

### Product Details

Brand:	AliCE®
Sequence:	MPGVIPSESN GLSRGSPSKK NRLSLKFFQK KETKRALDFT DSQENEEKAS EYRASEIDQV VPAAQSSPIN CEKRENLLPF VGLNNLGNTC YLNSILQVLY FCPGFKSGVK HLFNIISRKK EALKDEANQK DKGNCEDSL ASYELICSLQ SLIISVEQLQ ASFLLNPEKY TDELATQPRR LLNTLRELNP MYEGYLQHDA QEVLQCILGN IQETCQLLKK EEVKNVAELP TKVEEIPHPK EEMNGINSIE MDSMRHSEDF KEKLPKGNGK RKSDTEFGNM KKKVKLSKEH QSLEENQRQT RSKRKATSDT LESPPKIIPK YISENESPRP SQKKSrvkin WLKSATKQPS ILSKFCSLGK ITTNQGVKGQ SKENECDPEE DLGKCESDNT TNGCGLESPG NTVTPVNVNE VKPINKGEEQ IGFELVEKLF QGQLVLRTRC LECESLTERR EDFQDISVPV QEDELskvee SSEISPEPKT EMKTLRWAIS QFASVERIVG EDKYFCENCH HYTEAERSLL FDKMPEVITI HLKCFaasGL EFDCYGGGLS KINTPLLTPK KLSLEEWSTK PTNDSYGLFA VVMHSGITIS SGHYTASVKV TDLNSLELDK GNFVVDQMCE IGKPEPLNEE EARGVVENYN DEEVSIRVGG NTQPSKVLNK

KNVEAIGLLG GQKSKADYEL YNKASNPDKV ASTAFAENRN SETSDTTGTH ESDRNKESDD  
QTGINISGFE NKISYVVQSL KEYEGKWLLF DDSEVKVTEE KDFLNSLSPS TSPTSTPYLL FYKKL

**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.

### 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: USP1

Alternative Name: USP1 ([USP1 Products](#))

Background: Ubiquitin carboxyl-terminal hydrolase 1 (EC 3.4.19.12) (Deubiquitinating enzyme 1) (hUBP) (Ubiquitin thioesterase 1) (Ubiquitin-specific-processing protease 1) [Cleaved into: Ubiquitin carboxyl-terminal hydrolase 1, N-terminal fragment],FUNCTION: Negative regulator of DNA damage repair which specifically deubiquitinates monoubiquitinated FANCD2 (PubMed:15694335). Also involved in PCNA-mediated translesion synthesis (TLS) by deubiquitinating monoubiquitinated PCNA (PubMed:16531995, PubMed:20147293). Has almost no deubiquitinating activity by itself and requires the interaction with WDR48 to have a high activity (PubMed:18082604, PubMed:26388029). {ECO:0000269|PubMed:15694335, ECO:0000269|PubMed:16531995, ECO:0000269|PubMed:18082604, ECO:0000269|PubMed:20147293, ECO:0000269|PubMed:26388029}.

Molecular Weight: 88.2 kDa

UniProt: [O94782](#)

## 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.

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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!

Application Details

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 <b>Might differ depending on protein.</b>
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months