

Datasheet for ABIN3089515

ASCC2 Protein (AA 1-757) (Strep Tag)[Go to Product page](#)**1** Image

Overview

Quantity:	1 mg
Target:	ASCC2
Protein Characteristics:	AA 1-757
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This ASCC2 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Sequence:	MPALPLDQLQ ITHKDPKTGK LRTSPALHPE QKADRYFVLY KPPPKDNIPA LVEEYLERAT FVANDLDWLL ALPHDKFWCQ VIFDETLQKC LDSYLRYVPR KFDEGVASAP EVVDMQKRLH RSVFLTFLRM STHKESKDH F ISPSAFGEIL YNNFLFDIPK ILDL CVLFGK GNSPLLQKMI GNIFTQQPSY YSDLDELPT ILQVFSN ILQ HCGLQGDGAN TTPQKLEERG RLTPSDMPLL ELKDIVLYLC DTCTTLWAF L DIFPLACQTF QKHDFCYRLA SFYEAAIPEM ESAIKKRRLE DSKLLGDLWQ RLSHSRKKLM EIFHIILNQI CLLPILESSC DNIQGFIEEF LQIFSSLLQE KRFLRDYDAL FPVAEDISLL QQASSVLDET RTAYILQAVE SAWEGVDRRK ATDAKDPSVI EEPNGEPNGV TVTAEAVSQA SSHPENSEEE ECMGAAA AVG PAMCGVELDS LISQVKDLLP DLGEGFILAC LEYHYHDP EQ VINNILEERL APTLSQLDRN LDREMKPDPT PLLTSRHN VF QNDEFDVFSR DSVDLSRVHK GKSTRKEENT RLLNDKRAV AAQRQRYEQY SVVVEEVPLQ PGESLPYHSV YYEDEYDDTY DGNQVGANDA DSDDELISRR PFTIPQVLRT KVPREGQEED DDDEEDDADE EAPKPDHFVQ DPAVLREKAE ARMAFLAKK GYRHSSTAV AGSPRGHGQS RETTQERRKK
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EANKATRANH NRRTMADRKR SKGMIPS

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.

Characteristics:

Key Benefits:

- Made in Germany - from design to production - by highly experienced protein experts.
- Protein expressed with ALiCE® and purified by multi-step, protein-specific process to ensure correct folding and modification.
- 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 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.

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 in several dilutions and is measured against its specific reference buffer.
- We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.

Purification:

Two step purification of proteins expressed in Almost Living Cell-Free Expression System

Product Details

(ALiCE®):

1. In a first purification step, the protein is purified from the cleared cell lysate using StrepTag capture material. 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:	>80 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Endotoxin Level:	Low Endotoxin less than 1 EU/mg (< 0.1 ng/mg)
Grade:	Crystallography grade

Target Details

Target:	ASCC2
Alternative Name:	ASCC2 (ASCC2 Products)
Background:	Activating signal cointegrator 1 complex subunit 2 (ASC-1 complex subunit p100) (Trip4 complex subunit p100),FUNCTION: Ubiquitin-binding protein involved in DNA repair and rescue of stalled ribosomes (PubMed:29144457, PubMed:32579943, PubMed:32099016, PubMed:36302773). Plays a role in DNA damage repair as component of the ASCC complex (PubMed:29144457). Recruits ASCC3 and ALKBH3 to sites of DNA damage by binding to polyubiquitinated proteins that have 'Lys-63'-linked polyubiquitin chains (PubMed:29144457). Part of the ASC-1 complex that enhances NF-kappa-B, SRF and AP1 transactivation (PubMed:12077347). Involved in activation of the ribosome quality control (RQC) pathway, a pathway that degrades nascent peptide chains during problematic translation (PubMed:32579943, PubMed:32099016, PubMed:36302773). Specifically recognizes and binds RPS20/uS10 ubiquitinated by ZNF598, promoting recruitment of the RQT (ribosome quality control trigger) complex on stalled ribosomes, followed by disassembly of stalled ribosomes (PubMed:36302773). {ECO:0000269 PubMed:12077347, ECO:0000269 PubMed:29144457, ECO:0000269 PubMed:32099016, ECO:0000269 PubMed:32579943, ECO:0000269 PubMed:36302773}.
Molecular Weight:	86.4 kDa
UniProt:	Q9H1I8

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:

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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!

Restrictions:

For Research Use only

Handling

Format:

Liquid

Buffer:

The buffer composition is at the discretion of the manufacturer. If you have a special request, please contact us.

Handling Advice:

Avoid repeated freeze-thaw cycles.

Storage:

-80 °C

Storage Comment:

Store at -80°C.

Expiry Date:

Unlimited (if stored properly)



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