

Datasheet for ABIN3118899

## SUN2 Protein (AA 1-717) (Strep Tag)



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### Overview

Quantity:	250 µg
Target:	SUN2
Protein Characteristics:	AA 1-717
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This SUN2 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

### Product Details

Brand:	AlIcE®
Sequence:	<p>MSRRSQRLTR YSQGDDDGSS SSGGSSVAGS QSTLFKDSPL RTLKRKSSNM KRLSPAPQLG</p> <p>PSSDAHTSY Y SESLVHESWF PPRSSLEELH GDANWGEDLR VRRRRGTGG SSSRASGLVG</p> <p>RKATEDFLGS SSGYSSDDY VGYSVDVQQS SSSRLRSVAV RAGSLLWMVA TSPGRLFRLL</p> <p>YWWAGTTWYR LTAAASLLDV FVLTRRFSSL KTFLWFLLPL LLLTCLTYGA WYFYPYGLQT</p> <p>FHPALVSWWA AKDSRRPDEG WEARDSSPHF QAEQVMSRV HSLERRLEAL AAEFSSNWQK</p> <p>EAMRLERLEL RQGAPGQGGG GGLSHEDTLA LLEGLVSRRE AALKEDFRRE TAARIQEELS</p> <p>ALRAEHQQDS EDLFKKIVRA SQESEARIQK LKSEWQSMTQ ESFQESSVKE LRRLEDQLAG</p> <p>LQQELAALAL KQSSVAEEVG LLPQQIQAVR DDVESQFPAW ISQFLARGGG GRVGLLQREE</p> <p>MQAQLRELES KILTHVAEMQ GKSAREAAA SLSLTQKEGV IGVTEEQVHH IVKQALQRY S</p> <p>EDRIGLADYA LESGGASVIS TRCSETYETK TALLSLFGIP LWYHSQSPRV ILQPDVHPGN</p> <p>CWAFQGPQGF AVVRLSARIR PTAVTLEHVP KALSPNSTIS SAPKDFAIFG FDEDLQQEGT</p>

LLGKFTYDQD GEPIQTFHFQ APTMATYQVV ELRLTNWGH PEYTCIYRFR VHGEPAH

**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: SUN2

Alternative Name: SUN2 ([SUN2 Products](#))

Background: SUN domain-containing protein 2 (Protein unc-84 homolog B) (Rab5-interacting protein) (Rab5IP) (Sad1/unc-84 protein-like 2),FUNCTION: As a component of the LINC (Linker of Nucleoskeleton and Cytoskeleton) complex, involved in the connection between the nuclear lamina and the cytoskeleton. The nucleocytoplasmic interactions established by the LINC complex play an important role in the transmission of mechanical forces across the nuclear envelope and in nuclear movement and positioning. Specifically, SYNE2 and SUN2 assemble in arrays of transmembrane actin-associated nuclear (TAN) lines which are bound to F-actin cables and couple the nucleus to retrograde actin flow during actin-dependent nuclear movement. Required for interkinetic nuclear migration (INM) and essential for nucleokinesis and centrosome-nucleus coupling during radial neuronal migration in the cerebral cortex and during glial migration. Required for nuclear migration in retinal photoreceptor progenitors implicating association with cytoplasmic dynein-dynactin and kinesin motor complexes, and probably B-type lamins, SUN1 and SUN2 seem to act redundantly. The SUN1/2:KASH5 LINC complex couples telomeres to microtubules during meiosis, SUN1 and SUN2 seem to act at least partial redundantly. Anchors chromosome movement in the prophase of meiosis and is involved in selective gene expression of coding and non-coding RNAs needed for gametogenesis. Required for telomere attachment to nuclear envelope and gametogenesis. May also function on endocytic vesicles as a receptor for RAB5-GDP and participate in the activation of RAB5. {ECO:0000250|UniProtKB:Q8BJS4, ECO:0000269|PubMed:18396275, ECO:0000305}.

Molecular Weight: 80.3 kDa

UniProt: [Q9UH99](#)

Pathways: [Maintenance of Protein Location](#), [SARS-CoV-2 Protein Interactome](#), [The Global Phosphorylation Landscape of SARS-CoV-2 Infection](#)

## Application Details

Application Notes: In addition to the applications listed above we expect the protein to work for functional studies

## Application Details

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as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

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### Comment:

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### Restrictions:

For Research Use only

## Handling

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### Format:

Liquid

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### 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.**

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### Handling Advice:

Avoid repeated freeze-thaw cycles.

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### Storage:

-80 °C

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### Storage Comment:

Store at -80°C.

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### Expiry Date:

12 months