

Datasheet for ABIN3136833

## SYNPO2 Protein (AA 1-1087) (Strep Tag)



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### Overview

Quantity:	250 µg
Target:	SYNPO2
Protein Characteristics:	AA 1-1087
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This SYNPO2 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

### Product Details

Brand:	AliCE®
Sequence:	<p>MGTGDFICIS MTGGAPWGFR LQGGKEEQP LQVAKIRSQS KASGSGLREG DEVVSINGNP</p> <p>CADLTYPEVI KLMGITDSL HLLVKRPSSG TSETLDSESE TTNHQHLTHE GPMESTTLQI</p> <p>QQATETQSED FFLAPVQTKV PLTEDQSNOW GYAECPEEQ APPMLGSQEG HLVEEVILRQ</p> <p>KAEAGQPGHV VELQLSLSKE RHQCTSGPIV TLQGNDKSTS PDPDWSSQLE RTVHINSIPA</p> <p>PEKADTSLTS STSSGRELRV IQGRDPGGAG LPQVEVILDC SDRLKAECCR LQTGRGCVAS</p> <p>PVEGGRSEAP PSLVSFAVSS EGTEHGEDQR SGKDQSRPHK HRARHARLRR SESLSEKQVK</p> <p>EAKSKCKSIA LLLTDAPNPN SKGVLMFKKR RRRARKYTLV SYGTGELERE EEEEEDEQAG</p> <p>DKDEISEVAF LGTSESEVDE ELLSDVDDNT QVNFWDWDSG LVDIEKRLNR GDKMEMLPDT</p> <p>TGKGALMFAK RRERMEQFTA QNEEEKTGGM AGGGPDALQT DGLRTMTSYQ RKEESVRMQS</p> <p>SVSESSFQMG RSLASVPQQN GFSGVSETAG AQRMFPMNRT AKPFLGSMNQ PAAPFSPTRS</p> <p>VTSPISDFPA PPPYSAVSPP PEAFSRGVSS PVAGPAQPPP WPQPAPWSQP AFYDSSEQIA</p>

SRDERIAVPA KRTGILQEAK RRGTTKPMFT FKETKVSPNP ELLSLLQNAE GKRGTGGDSG  
PEEDYLSLGA EACNFMQSSA KQKTTPPVAP KPAVKSPSSS QPVAPVSPVW SPGVAPAQRP  
AFSTSNPPNP PQVTAVSSIK IAQPAAPPAR PASALNLAGP FKGPQAVVVS HNYTPKPSAP  
TPLVNAAPAG AGGPSNELPG MSGKGAQLFA KRQSRMEKYV VSDSTVQAHT VRAQSPTPSL  
PASWKYSSNV RAPPPVAYNP IHSPSYPLAA IKSQPPGAQA SKTSKKKGKK PLNTLDVMKH  
QPYQLNASLF TFQPPDSKDG LPQKSTVKVS SAPAMKQALP PRQANVGSPT NAQASSVYSV  
PAYTSQPNFF AAEATSPVSA SPVPVSVPTS PKQESTSTSY FVAPRPKFSA KKSGVTQVW  
KPSVVEE

**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:

## Product Details

- 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®).

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

Grade: custom-made

## Target Details

Target: SYNPO2

Alternative Name: Synpo2 ([SYNPO2 Products](#))

Background: Synaptopodin-2 (Myopodin),FUNCTION: Has an actin-binding and actin-bundling activity (PubMed:11673475). Can induce the formation of F-actin networks. At the sarcomeric Z lines is proposed to act as adapter protein that links nascent myofibers to the sarcolemma via ZYX and may play a role in early assembly and stabilization of the Z lines. Involved in autophagosome formation. May play a role in chaperone-assisted selective autophagy (CASA) involved in Z lines maintenance in striated muscle under mechanical tension, may link the client-processing CASA chaperone machinery to a membrane-tethering and fusion complex providing autophagosome membranes. Involved in regulation of cell migration. May be a tumor suppressor (By similarity). {ECO:0000250|UniProtKB:D4A702, ECO:0000250|UniProtKB:Q9UMS6, ECO:0000269|PubMed:11673475}.

Molecular Weight: 116.5 kDa

UniProt: [Q91YE8](#)

## 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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Application Details

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 <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