

Datasheet for ABIN3114499

SREBF chaperone Protein (SCAP) (AA 1-1279) (Strep Tag)[Go to Product page](#)

Overview

Quantity:	1 mg
Target:	SREBF chaperone (SCAP)
Protein Characteristics:	AA 1-1279
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This SREBF chaperone protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Sequence:	MTLTERLREK ISRAFYNHGL LCASYPIPII LFTGFCILAC CYPLKLP LP GTGPVEFTTP VKDYSPPPVD SDRKQGEPT E QPEWYVGAPV AYWQQIFVKS SVFPWHKNLL AVDVFRSPLS RAFQLVEEIR NHVLRDSSGI RSLEELCLQV TDLLPGLRKL RNLLPEHGCL LLSPGNFWQN DWERFHADPD IIGTIHQHEP KTLQTSATLK DLLFGVPGKY SGVSLYTRKR MVSYTITLVF QHYHAKFLGS LRARMLLHP SPNCSLRAES LVHVHFKEEI GVAELIPLVT TYIILFAYIY FSTRKIDMVK SKWGLALAAV VTLVSSLLMS VGLCTLFGLT PTLNGGEIFP YLVVVIGLEN VLVLT KSVVS TPVDLEV KLR IAQGLSSESW SIMKNMATEL GIILIGYFTL VPAIQEFCLF AVVGLVSDFF LQMLFFTTVL SIDIRRMELA DLNKRLPPEA CLPSAKPVGQ PTRYERQLAV RPSTPHTITL QPSSFRNLRL PKRLRVVYFL ARTRLAQR LI MAGTVVWIGI LVYTDPAGLR NYLAAQVTEQ SPLGEGALAP MPVPSGMLPP SHPDPAFSIF PPDAPKLPEN QTSPGESPER GGPAEVVHDS PVPEVTWGPE DEELWRKLSF RHWPTLFSYY NITLAKRYIS LLPVIPVTLR LNPREAL EGR HPQDGRSAWP PPGPIAGHW EAGPKGPGGV QAHGDTVLYK VAALGLATGI
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VLVLLLLCLY RVLCPRNYGQ LGGGPGRRRR GELPCDDYGY APPETEIVPL VLRGHLMDIE
CLASDGMLLV SCCLAGHVCV WDAQTDGCLT RIPRPGRQRR DSGVGSGLA QESWERLSDG
GKAGPEEPGD SPPLRHRPRG PPPPSLFGDQ PDLTCLIDTN FSAQPRSSQP TQPEPRHRAV
CGRSRDSPGY DFSCLVQRVY QEEGLAAVCT PALRPPSPGP VLSQAPEDEG GSPEKGSPSL
AWAPSAEGSI WSLELQGNLI VVGRSSGRLE VWDAIEGVLC CSSEEVSSGI TALVFLDKRI
VAARLNGSLD FFSLEHTAL SPLQFRGTPG RGSSPASPVY SSSDTVACHL THTVPCAHQK
PITALKAAAG RLVTGSQDHT LRVFRLDSC CLFTLQGHSG AITTVIIDQT MVLASGGQDG
AICLWDVLTG SRVSHVFAHR GDVTSLTCTT SCVISSGLDD LISIWRSTG IKFYISIQDL
GCGASLGVIS DNLLVTGGQG CVSFWDLNYG DLLQTVYLGK NSEAQPARQI LVLDNAAIVC
NFGSELSLVY VPSVLEKLD

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 -

Product Details

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 (ALICE®): <ol style="list-style-type: none">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)

Target Details

Target:	SREBF chaperone (SCAP)
Alternative Name:	SCAP (SCAP Products)
Background:	Sterol regulatory element-binding protein cleavage-activating protein (SCAP) (SREBP cleavage-activating protein),FUNCTION: Escort protein required for cholesterol as well as lipid homeostasis (By similarity). Regulates export of the SCAP-SREBP complex from the endoplasmic reticulum to the Golgi upon low cholesterol, thereby regulating the processing of sterol regulatory element-binding proteins (SREBPs) SREBF1/SREBP1 and SREBF2/SREBP2 (By similarity). At high sterol concentrations, formation of a ternary complex with INSIG (INSIG1 or INSIG2) leads to mask the ER export signal in SCAP, promoting retention of the complex in the endoplasmic reticulum (By similarity). Low sterol concentrations trigger release of INSIG, a conformational change in the SSD domain of SCAP, unmasking of the ER export signal, promoting recruitment into COPII-coated vesicles and transport of the SCAP-SREBP to the Golgi: in the Golgi, SREBPs are then processed, releasing the transcription factor fragment of SREBPs from the membrane, its import into the nucleus and up-regulation of LDLR, INSIG1 and the mevalonate pathway (By similarity). Binds cholesterol via its SSD domain (By similarity).

Target Details

{ECO:0000250|UniProtKB:P97260}.

Molecular Weight: 139.7 kDa

UniProt: [Q12770](#)

Pathways: [SARS-CoV-2 Protein Interactome](#)

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!

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)