Datasheet for ABIN3135693

SREBF chaperone Protein (SCAP) (AA 1-1276) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	SREBF chaperone (SCAP)
Protein Characteristics:	AA 1-1276
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
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

Brand:	AliCE®
Sequence:	MTLTERLREK ISQAFYNHGL LCASYPIPII LFTGLCILAC CYPLLKLPLP GTGPVEFSTP VKGYSPPPAD SDHKQGEPSE QPEWYVGAPV AYIQQIFVKS SVSPWHRNLL AVDVFRSPLS RAFQLVEEIR NHVLRDSSGT KSLEEVCLQV TDLLPGLRKL RSLLPEHGCL LLSPGNFWQN DWERFHADPD IIGTIHQHEP KTLQTSATLK DLLFGVPGKY SGVSLYTRKR MVSYTITLVF QRYHAKFLSS LRARLMLLHP SPNCSLRAEN LVHVHFKEEI GIAELIPLVT TYIILFAYIY FSTRKIDMVK SKWGLALAAV VTVLSSLLMS VGLCTLFGLT PTLNGGEIFP YLVVVIGLEN VLVLTKSVVS TPVDLEVKLR IAQGLSSESW SIMKNAATEL GIILIGYFTL VPAIQEFCLF AVVGLVSDFF LQMLFFTTVL SIDIRRMELA DLNKRLPPES CLPSAKPVGR PARYERQQAV RPSTPHTITL QPSSFRNLRL PKRLRVIYFL ARTRLAQRLI MAGTVVWIGI LVYTDPAGLR TYLAAQVTEQ SPLGEGSLGP MPVPSGVLPA SHPDPAFSIF PPDAPKLPEN QTLPGELPEH AGPAEGVHDS RAPEVTWGPE DEELWRKLSF RHWPTLFNYY NITLAKRYIS LLPVIPVTLH

LNPREALEGR HPQDGRSAWA PQEPLPAGLW ESGPKGPGGT QTHGDITLYK VAALGLAAGI VLVLLLLCLY RVLCPRNYGQ PGGGPGRRRR GELPCDDYGY APPETEIVPL VLRGHLMDIE CLASDGMLLV SCCLAGQVCV WDAQTGDCLT RIPRPGPRRD SCGGGAFETQ ENWERLSDGG KASPEEPGDS PPLRRRPRGP PPPSLFGDQP DLTCLIDTNF SVQLPPEPTQ PEPRHRVGCG RSRDSGYDFS RLVQRVYQEE GLAAMRMPAL RPPSPGPPLP QASQEEGTAP EKGSPPLAWT PSTAGSIWSL ELQGNLIVVG RSSGRLEVWD AIEGVLCCSN EEISSGITAL VFLDRRIVAA RLNGSLDFFS LETHTSLSPL QFRGTPGRGS SPSSSVYSSS NTVTCHRTHT VPCAHQKPIT ALRAAAGRLV TGSQDHTLRV FRLDDSCCLF TLKGHSGAIT AVYIDQTMVL ASGGQDGAIC LWDVLTGSRV SQTFAHRGDV TSLTCTASCV ISSGLDDFIS IWDRSTGIKL YSIQQDLGCG ASLGVISDNL LVTGGQGCVS FWDLNYGDLL QTVYLGKNSE AQPARQILVL DNAAIVCNFG SELSLVYVPS VLEKLD

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 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 -

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 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:	made-to-order

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 (PubMed:11358865, PubMed:9854040). 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 (PubMed:11358865, PubMed:9854040, PubMed:29068315). 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). {ECO:0000250|UniProtKB:P97260, ECO:0000269|PubMed:11358865, ECO:0000269|PubMed:29068315, ECO:0000269|PubMed:9854040}.
Molecular Weight:	139.6 kDa

Target Details

UniProt:	Q6GQT6
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.
Comment:	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!
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 **Might differ depending on protein.**
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months