Datasheet for ABIN3114501

SREBF2 Protein (AA 1-1141) (Strep Tag)

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Overview

Quantity:	1 mg
Target:	SREBF2
Protein Characteristics:	AA 1-1141
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This SREBF2 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), ELISA, SDS-PAGE (SDS)

Product Details

Sequence:	MDDSGELGGL ETMETLTELG DELTLGDIDE MLQFVSNQVG EFPDLFSEQL CSSFPGSGGS GSSSGSSGSS SSSSNGRGSS SGAVDPSVQR SFTQVTLPSF SPSAASPQAP TLQVKVSPTS VPTTPRATPI LQPRPQPQPQ PQTQLQQQTV MITPTFSTTP QTRIIQQPLI YQNAATSFQV LQPQVQSLVT SSQVQPVTIQ QQVQTVQAQR VLTQTANGTL QTLAPATVQT VAAPQVQQVP VLVQPQIIKT DSLVLTTLKT DGSPVMAAVQ NPALTALTTP IQTAALQVPT LVGSSGTILT TMPVMMGQEK VPIKQVPGGV KQLEPPKEGE RRTTHNIIEK RYRSSINDKI IELKDLVMGT DAKMHKSGVL RKAIDYIKYL QQVNHKLRQE NMVLKLANQK NKLLKGIDLG SLVDNEVDLK IEDFNQNVLL MSPPASDSGS QAGFSPYSID SEPGSPLLDD AKVKDEPDSP PVALGMVDRS RILLCVLTFL CLSFNPLTSL LQWGGAHDSD QHPHSGSGRS VLSFESGSGG WFDWMMPTLL LWLVNGVIVL SVFVKLLVHG EPVIRPHSRS SVTFWRHRKQ ADLDLARGDF AAAAGNLQTC LAVLGRALPT SRLDLACSLS WNVIRYSLQK LRLVRWLLKK VFQCRRATPA TEAGFEDEAK TSARDAALAY HRLHQLHITG KLPAGSACSD VHMALCAVNL AECAEEKIPP STLVEIHLTA

AMGLKTRCGG KLGFLASYFL SRAQSLCGPE HSAVPDSLRW LCHPLGQKFF MERSWSVKSA AKESLYCAQR NPADPIAQVH QAFCKNLLER AIESLVKPQA KKKAGDQEEE SCEFSSALEY LKLLHSFVDS VGVMSPPLSR SSVLKSALGP DIICRWWTSA ITVAISWLQG DDAAVRSHFT KVERIPKALE VTESPLVKAI FHACRAMHAS LPGKADGQQS SFCHCERASG HLWSSLNVSG ATSDPALNHV VQLLTCDLLL SLRTALWQKQ ASASQAVGET YHASGAELAG FQRDLGSLRR LAHSFRPAYR KVFLHEATVR LMAGASPTRT HQLLEHSLRR RTTQSTKHGE VDAWPGQRER ATAILLACRH LPLSFLSSPG QRAVLLAEAA RTLEKVGDRR SCNDCQQMIV KLGGGTAIAA S

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:

Product Details

- 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®): 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:	SREBF2
Alternative Name:	SREBF2 (SREBF2 Products)
Background:	Sterol regulatory element-binding protein 2 (SREBP-2) (Class D basic helix-loop-helix protein 2) (bHLHd2) (Sterol regulatory element-binding transcription factor 2) [Cleaved into: Processed sterol regulatory element-binding protein 2 (Transcription factor SREBF2)],FUNCTION: [Sterol regulatory element-binding protein 2]: Precursor of the transcription factor form (Processed sterol regulatory element-binding protein 2), which is embedded in the endoplasmic reticulum membrane (PubMed:32322062). Low sterol concentrations promote processing of this form, releasing the transcription factor form that translocates into the nucleus and activates transcription of genes involved in cholesterol biosynthesis (PubMed:32322062). {ECO:0000269|PubMed:32322062}., FUNCTION: [Processed sterol regulatory element-binding protein 2]: Key transcription factor that regulates expression of genes involved in cholesterol biosynthesis (PubMed:12177166, PubMed:32322062). Binds to the sterol regulatory element 1 (SRE-1) (5'-ATCACCCCAC-3'). Has dual sequence specificity binding to both an E-box motif (5'-ATCACGTGA-3') and to SRE-1 (5'-ATCACCCCAC-3') (PubMed:7903453, PubMed:12177166). Regulates transcription of genes related to cholesterol synthesis pathway (PubMed:12177166, PubMed:32322062). {ECO:0000269|PubMed:12177166, ECO:0000269|PubMed:32322062,

Target Details

	ECO:0000269|PubMed:7903453}.
Molecular Weight:	123.7 kDa
UniProt:	Q12772
Pathways:	Regulation of Lipid Metabolism by PPARalpha

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. 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)