Datasheet for ABIN3135963

SGOL2 Protein (AA 1-1164) (Strep Tag)

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Overview

Quantity:	1 mg
Target:	SGOL2
Protein Characteristics:	AA 1-1164
Origin:	Mouse
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This SGOL2 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Sequence:	MEYPGIKVDT VTSGIQRRVK GRIAKTNLNV SLASKIKAKI LNNSSIFKIS LKHNNRALAR ALSKEKENSR RITTEKMQLQ KEVEKLNFEN TFLRLKLNTL NKKLVEIESH VSNDLLTAIE ISSLSEFHQG SFLLSATKKQ RNSKQCKPAH LPYARVLLTS ENDDDDGADD KWQTKCNNRT ISKTSPDSTS SVSRQPSSLH QCNLKAFPPK EDNQKTCGSG HLEHTSSVDI LPNESHSDQS PKSSLSEMKT APSPSLRREK LSHGNVTMRK KCVSSTPDIL YVTDLDHQPT SSPGSNWNNE IHGHTNETSN NTQRNAECFL DLPSESSSEP DAKRMELVQK NTDSFHFQKT VYDAADMELT ATDIGKIVAV SKSKKNQNKK KADCRKETFR KVKGASSDKK RESSKRECKD GSEVGAEEEA DAARAERGAG VLDGRGDSEE PNCISSTEQP SQVNTQKKRT LQNSSDQENI QNTKRRQTYT TDEQEETNPF SRHSVKFLQD GKFDLCQKTL HHNLSKPSRQ TFVIRKSEKD NLFPNQEDKD TISENLEVTN EFHIDDLSIE ANENVCDHET QTMLDLKKSV SAQQNQTKIN KTKQKINRRT KIISVMSQVY EDNDKDIHVL EKDNFPFHTQ ANKETTSGNL ESSKEFESPL LFTRDNGSLR DCKTQNVLDL HKQIPDLYPD RNESQISKIP RQKVNRKTEV ISGVKCFSND QGVHCSEKDK

SLLLQKDKDF PGTLKDLSEF DTPAFCNKDS AKSCDYKSEM LLGLKKHDPN MQPACQDDSK AGKKLRQKVN RKTEIISKIT QIHENDRGST HDSLNKKLCQ KVNISKIISQ MNQIYETINE DGNGFKSSIK DCEDIKSCDF GEINSNKKEN YDPIQDPCTL VKKTKRKGSC KAGSSLAGAK NRCGLQLTDS SQVQSVPLDS GLRHHPNEAD SGPGEQTNLP KMQKQSAGRS LGDAFSVSLG KEGSRPAKAV SKMTPKSKKR KLPLGCSPET HGTVEITPNT DLAKAVDSQQ TEKENYLEKE KIAKRKPDFC TKVLKPLSET CSSNIKNSSL DSMCKSSLPL SISSRKTLML EESSSLESTC IFQVGDAAHE KITTGTRNPH HRTQKSTPGS RTSLVLVDTS SVSDTNPANP ENESEGQSSH PMRRKRQCVP LNLTEPSLRS KMRR

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!

Product Details

	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®): 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:	SGOL2
Alternative Name:	Sgo2 (SGOL2 Products)
Background:	Shugoshin 2 (Shugoshin-2) (Shugoshin-like 2),FUNCTION: Cooperates with PPP2CA to protect centromeric cohesin from separase-mediated cleavage in oocytes specifically during meiosis I. Has a crucial role in protecting REC8 at centromeres from cleavage by separase. During meiosis, protects centromeric cohesion complexes until metaphase II/anaphase II transition, preventing premature release of meiosis-specific REC8 cohesin complexes from anaphase I centromeres. Is thus essential for an accurate gametogenesis. May act by targeting PPP2CA to centromeres, thus leading to cohesin dephosphorylation. Essential for recruiting KIF2C to the inner centromere and for correcting defective kinetochore attachments. Involved in centromeric enrichment of AUKRB in prometaphase. {ECO:0000250|UniProtKB:Q562F6, ECO:0000269|PubMed:18084284, ECO:0000269|PubMed:18765791}.
Molecular Weight:	130.3 kDa
UniProt:	Q7TSY8

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)