Datasheet for ABIN3095602

SPOP-B Protein (AA 1-374) (Strep Tag)

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Overview

Quantity:	1 mg
Target:	SPOP-B
Protein Characteristics:	AA 1-374
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This SPOP-B protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Brand:	AliCE®
Sequence:	MSRVPSPPPP AEMSSGPVAE SWCYTQIKVV KFSYMWTINN FSFCREEMGE VIKSSTFSSG ANDKLKWCLR VNPKGLDEES KDYLSLYLLL VSCPKSEVRA KFKFSILNAK GEETKAMESQ RAYRFVQGKD WGFKKFIRRD FLLDEANGLL PDDKLTLFCE VSVVQDSVNI SGQNTMNMVK VPECRLADEL GGLWENSRFT DCCLCVAGQE FQAHKAILAA RSPVFSAMFE HEMEESKKNR VEINDVEPEV FKEMMCFIYT GKAPNLDKMA DDLLAAADKY ALERLKVMCE DALCSNLSVE NAAEILILAD LHSADQLKTQ AVDFINYHAS DVLETSGWKS MVVSHPHLVA EAYRSLASAQ CPFLGPPRKR LKQS **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:

Product Details

- 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:

- 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:	SPOP-B

Target Details

Alternative Name:	SPOP (SPOP-B Products)
Background:	Speckle-type POZ protein (HIB homolog 1) (Roadkill homolog 1),FUNCTION: Component of a cullin-RING-based BCR (BTB-CUL3-RBX1) E3 ubiquitin-protein ligase complex that mediates the ubiquitination of target proteins, leading most often to their proteasomal degradation. In complex with CUL3, involved in ubiquitination and proteasomal degradation of BRMS1, DAXX, PDX1/IPF1, GLI2 and GLI3. In complex with CUL3, involved in ubiquitination of MACROH2A1 and BMI1, this does not lead to their proteasomal degradation. Inhibits transcriptional activation of PDX1/IPF1 targets, such as insulin, by promoting PDX1/IPF1 degradation. The cullin-RING-based BCR (BTB-CUL3-RBX1) E3 ubiquitin-protein ligase complex containing homodimeric SPOP has higher ubiquitin ligase activity than the complex that contains the heterodimer formed by SPOP and SPOPL. Involved in the regulation of bromodomain and extra-terminal motif (BET) proteins BRD2, BRD3, BRD4 stability (PubMed:32109420). Plays an essential role for proper translation, but not for their degradation, of critical DNA replication licensing factors CDT1 and CDC6, thereby participating in DNA synthesis and cell proliferation (PubMed:36791496). Regulates interferon regulatory factor 1/IRF1 proteasomal turnover by targeting S/T-rich degrons in IRF1 (PubMed:37622993). Facilitates the lysosome-dependent degradation of enterovirus EV71 protease 2A by inducing its 'Lys-48'-linked polyubiquitination, which ultimately restricts EV71 replication (PubMed:37796126). Acts as an antiviral factor also against hepatitis B virus/HBV by promoting ubiquitination and subsequent degradation of HNF1A (PubMed:38018242). In turn, inhibits HBV transcription and replication by preventing HNF1A stimulating activity of HBV preS1 promoter and enhancer II (PubMed:38018242). {ECO:0000269|PubMed:14528312, ECO:0000269|PubMed:15897469, ECO:0000269|PubMed:16524876, ECO:0000269|PubMed:19818708, ECO:0000269|PubMed:22085717, ECO:0000269|PubMed:22632832, ECO:0000269|PubMed:32109420, ECO:0000269|PubMed:37622993, ECO:0000269|PubMed:37796126, ECO:0000269|PubMed:38018242}.
Molecular Weight:	42.1 kDa
UniProt:	O43791

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

Application Details

	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