

Datasheet for ABIN3095593

SMURF1 Protein (AA 1-757) (Strep Tag)[Go to Product page](#)**1** Image

Overview

Quantity:	1 mg
Target:	SMURF1
Protein Characteristics:	AA 1-757
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This SMURF1 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Sequence:	MSNPGTRRNG SSIKIRLTVL CAKNLAKKDF FRLPDPFAKI VVDGSGQCHS TDTVKNTLDP KWNQHYDLYV GKTDSTITSV WNHKKIHKKQ GAGFLGCVRL LSNAISRLKD TGYQRDLCK LNPSDTDAVR GQIVVSLQTR DRIGTGGSVV DCRGLLENeg TVYEDSGPGR PLSCFMEEPA PYTDSTGAAA GGGNCRFVES PSQDQRLQAQ RLRNPDVRGS LQTPQNRPHG HQSPELPEGY EQRTTVQGQV YFLHTQTGVS TWHDPRI PSP SGTIPGGDAA FLYEFLLQGH TSEPRDLNSV NCDELGPLPP GWEVRSTVSG RIYFVDHNNR TTQFTDPR LH HIMNHQCQLK EPSQPLPLPS EGSLEDEELP AQRYERDLVQ KLVLRHEL S LQQPQAGHCR IEVSREEIFE ESYRQIMKMR PKDLKKRLMV KFRGEEGLDY GGVAREWLYL LCHEMLNPYY GLFQYSTDNI YMLQINPDSS INPDHLSYFH FVGRIMGLAV FHGHYINGGF TVPFYKQLLG KPIQLSDLES VDPELHKS LV WILENDITPV LDHTFCVEHN AFGRILQHEL KPNGRNPVPT EENKKEYVRL YVNWRFMRGI EAQFLALQKG FNELIPQHLL KPFDQKELEL IIGGLDKIDL NDWKSNTRLK HCVADSNIVR WFWQAVETFD EERRARLLQF VTGSTRVPLQ GFKALQGSGT AAGPRLFTIH LIDANTDNLP
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KAHTCFNRID IPPYESYEKL YEKLLTAVEE TCGFAVE

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:

- 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

Product Details

(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:	SMURF1
Alternative Name:	SMURF1 (SMURF1 Products)
Background:	<p>E3 ubiquitin-protein ligase SMURF1 (hSMURF1) (EC 2.3.2.26) (HECT-type E3 ubiquitin transferase SMURF1) (SMAD ubiquitination regulatory factor 1) (SMAD-specific E3 ubiquitin-protein ligase 1),FUNCTION: E3 ubiquitin-protein ligase that acts as a negative regulator of BMP signaling pathway. Mediates ubiquitination and degradation of SMAD1 and SMAD5, 2 receptor-regulated SMADs specific for the BMP pathway. Promotes ubiquitination and subsequent proteasomal degradation of TRAF family members and RHOA. Promotes ubiquitination and subsequent proteasomal degradation of MAVS (PubMed:23087404). Acts as an antagonist of TGF-beta signaling by ubiquitinating TGFBR1 and targeting it for degradation (PubMed:21791611). Plays a role in dendrite formation by melanocytes (PubMed:23999003). {ECO:0000269 PubMed:10458166, ECO:0000269 PubMed:19937093, ECO:0000269 PubMed:21402695, ECO:0000269 PubMed:21791611, ECO:0000269 PubMed:23087404, ECO:0000269 PubMed:23999003}.</p>
Molecular Weight:	86.1 kDa
UniProt:	Q9HCE7
Pathways:	Regulation of Cell Size

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
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Application Details

	guarantee though.
Comment:	<p>ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from <i>Nicotiana tabacum</i> 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.</p> <p>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!</p>
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)



Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process