

Datasheet for ABIN3137040

SMURF1 Protein (AA 1-731) (Strep Tag)



[Go to Product page](#)

Overview

Quantity:	250 µg
Target:	SMURF1
Protein Characteristics:	AA 1-731
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This SMURF1 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Brand:	AliCE®
Sequence:	<p>MSNPGTRRNG SSIKIRLTVL CAKNLAKKDF FRLPDPFAKI VVDGSGQCHS TDTVKNTLDP</p> <p>KWNQHYDLYV GKTDSITISV WNHKKIHKKQ GAGFLGCVRL LSNAISRLKD TGYQRDLCK</p> <p>LNPSTDAVR GQIVVSLQTR DRIGGGGSV DCRGLENNEG TVYEDSGPGR PLSCLMEEPA</p> <p>PYTDGTGAAA GGGNCRFVES PSQDQRLVQ RLRNPEVRGP LQTPQNRPHG HQSPELPEGY</p> <p>EQRTTVQGQV YFLHTQTGVS TWHDPRI PRD LNSVNCDELG PLPPGWEVRS TVSGRIYFVD</p> <p>HNNRTTQFTD PRLHHIMNHQ CQLKEPSQPL QLPSEGSVED EELPAQRYER DLVQKLKVL R</p> <p>HELSQLQPQA GHCRIEVSRE EIFEESYRQI MKMRPKDLKK RLMVKFRGEE GLDYGGVARE</p> <p>WLYLLCHEML NPYYG L FQYS TDNIYTLQIN PDSSINPDHL SYFHFVGRIM GLAVFHGHYI</p> <p>NGGFTVPFYK QLLGKPIQLS DLESVDPELH KSLVWILEND ITPVLDHTFC VEHN AFGRI L</p> <p>QHELKPNGRN VPVTEENKKE YVRLYVNWRF MRGIEAQFLA LQKGFNELLIP QHLLKPFQDK</p> <p>ELELIIGGLD KIDLNDWKS N TRLKHCVADS NIVRWFQAV ETFDEERRAR LLQFVTGSTR</p>

VPLQGFKALQ GSTGAAGPRL FTIHLIDANT DNLPKAHTCF NRIDIPPYES YEKLYEKLLT
AVEETCGFAV E

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 - 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®).

Product Details

Purity: > 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).

Grade: custom-made

Target Details

Target: SMURF1

Alternative Name: Smurf1 ([SMURF1 Products](#))

Background: E3 ubiquitin-protein ligase SMURF1 (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 (By similarity). Mediates ubiquitination and degradation of SMAD1 and SMAD5, 2 receptor-regulated SMADs specific for the BMP pathway (By similarity). Promotes ubiquitination and subsequent proteasomal degradation of TRAF family members and RHOA (By similarity). 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 (By similarity). Plays a role in dendrite formation by melanocytes (By similarity). {ECO:0000250|UniProtKB:Q9HCE7, ECO:0000269|PubMed:23087404}.

Molecular Weight: 83.4 kDa

UniProt: [Q9CUN6](#)

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 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.

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Application Details

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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