

Datasheet for ABIN3130681

SMURF2 Protein (AA 1-748) (Strep Tag)



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Overview

Quantity:	250 µg
Target:	SMURF2
Protein Characteristics:	AA 1-748
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This SMURF2 protein is labelled with Strep Tag.
Application:	SDS-PAGE (SDS), ELISA, Western Blotting (WB)

Product Details

Brand:	AliCE®
Sequence:	<p>MSNPGGRRNG PVKLRLTVLC AKNLVKKDFF RLPDPFAKV VDGSGQCHST DTVKNTLDPK</p> <p>WNQHYDLYIG KSDSVTISVW NHKKIHKKQG AGFLGCVRL SNAINRLKDT GYQRDLCKL</p> <p>GPNDNDTVRG QIVVSLQSRD RGTGGQVVD CSRLFDNDLP DGWEERTAS GRIQYLNHIT</p> <p>RTTQWERPTR PASEYSSPGR PLSCFVDENT PITGTNGATC GHSSDPRLAE RRVRSQRHRN</p> <p>YMSRTHLHTP PDLPEGYEQR TTQQGQVYFL HTQTGVSTWH DPRVPRDLN INCEELGPLP</p> <p>PGWEIRNTAT GRVYFVDHNN RTTQFTDPRL SANLHLVLNR QNQLKDQQQ QVPLCPDDT</p> <p>ECLTVPRYKR DLVQKLKILR QELSQQQPQA GHCRIEVSRE EIFEESYRQV MKMRPKDLWK</p> <p>RLMIKFRGEE GLDYGGVARE WLYLLSHEML NPYYGFLQYS RDDIYTLQIN PDSAVNPEHL</p> <p>SYFHFVGRIM GMAVFHGHYI DGGFTLPFYK QLLGKSITLD DMELVDPDLH NSLVWILEND</p> <p>ITGVLDHTFC VEHNAYGEII QHELKPNGKS IPVTEENKE YVRLYNWRF LRGEAQFLA</p> <p>LQKGFNEVIP QHLLKTFDEK ELELIICGLG KIDVSDWKVN TRLKHCTPDS NVVKWFWKAV</p>

EFFDEERRAR LLQFVTGSSR VPLQGFKALQ GAAGPRLFTI HQIDACTNNL PKAHTCFNRI
DIPPYESYEK LYEKLLTAIE ETCGFAVE

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: SMURF2

Alternative Name: Smurf2 ([SMURF2 Products](#))

Background: E3 ubiquitin-protein ligase SMURF2 (EC 2.3.2.26) (HECT-type E3 ubiquitin transferase SMURF2) (SMAD ubiquitination regulatory factor 2) (SMAD-specific E3 ubiquitin-protein ligase 2),FUNCTION: E3 ubiquitin-protein ligase which accepts ubiquitin from an E2 ubiquitin-conjugating enzyme in the form of a thioester and then directly transfers the ubiquitin to targeted substrates. Interacts with SMAD7 to trigger SMAD7-mediated transforming growth factor beta/TGF-beta receptor ubiquitin-dependent degradation, thereby down-regulating TGF-beta signaling. In addition, interaction with SMAD7 activates autocatalytic degradation, which is prevented by interaction with AIMP1. Also forms a stable complex with TGF-beta receptor-mediated phosphorylated SMAD1, SMAD2 and SMAD3, and targets SMAD1 and SMAD2 for ubiquitination and proteasome-mediated degradation. SMAD2 may recruit substrates, such as SNON, for ubiquitin-dependent degradation. Negatively regulates TGFB1-induced epithelial-mesenchymal transition and myofibroblast differentiation. {ECO:0000250|UniProtKB:Q9HAU4}.

Molecular Weight: 86.2 kDa

UniProt: [A2A5Z6](#)

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