

Datasheet for ABIN3095567

SRGAP2 Protein (AA 1-1071) (Strep Tag)[Go to Product page](#)**1** Image

Overview

Quantity:	1 mg
Target:	SRGAP2
Protein Characteristics:	AA 1-1071
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This SRGAP2 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Sequence:	MTSPAKFKKD KEIIAEYDTQ VKEIRAQLTE QMKCLDQQCE LRVQLQLDLQ DFFRKKAIEI MDYSRNLEKL AERFLAKTRS TKDQQFKKDQ NVLSPVNCWN LLLNQVKRES RDHTTLSDIY LNNIIPRFVQ VSEDSGRFLK KSKEVGQQLQ DDLMKVLNEL YSVMKTYHMY NADSISAQSK LKEAEKQEEK QIGKSVKQED RQTPRSPDST ANVRIEEKHV RRSSVKKIEK MKEKRQAKYT ENKLKAIKAR NEYLLALEAT NASVFKYYIH DLSDLIDQCC DLGYHASLNR ALRTFLSAEL NLEQSKHEGL DAIENAVENL DATSDKQRLM EMYNNVFCPP MKFEFQPHMG DMASQLCAQQ PVQSELVQRC QQLQSRLSTL KIENEEVKKT MEATLQTIQD IVTVEDFDVS DCFQYSNSME SVKSTVSETF MSKPSIAKRR ANQQETEYFY FTKMKEYLEG RNLITKLQAK HDLLQKTLGE SQRTDCSLAR RSSTVRKQDS SQAIPLVES CIRFISRHGL QHEGIFRVSG SQVEVNDIKN AFERGEDPLA GDQNDHDMDS IAGVLKLYFR GLEHPLFPKD IFHDLMACVT MDNLQERALH IRKVLLVLPK TTLIIMRYLF AFLNHLSQFS EENMMDPYNL AICFGPSLMS VPEGHDQVSC QAHVNELIKT IIIQHENIFP SPRELEGPVY SRGGSMEDYC DSPHGETTSV EDSTQDVTAE
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HHTSDDECEP IEAIAKFDYV GRTARELSFK KGASLLLYQR ASDDWWEGRH NGIDGLIPHQ
YIVVQDTEG VVERSSPKSE IEVISEPPEE KVTARAGASC PSGGHVADIY LANINKQRKR
PESGSIRKTF RSDSHGLSSS LTDSSSPGVG ASCRPSSQPI MSQSLPKEGP DKCSISGHGS
LNSISRHSSL KNRLDSPQIR KTATAGRSKS FNNHRPMDPE VIAQDIEATM NSALNELREL
ERQSSVKHTP DVVLDLTLEPL KTSPVVAPTS EPSSPLHTQL LKDPEPAFQR SASTAGDIAC
AFRPVKSVM AAPVKPPATR PKPTVFPKTN ATSPGVNSST SPQSTDKSCT V

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.

Product Details

- 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)
Grade:	Crystallography grade

Target Details

Target:	SRGAP2
Alternative Name:	SRGAP2 (SRGAP2 Products)
Background:	<p>SLIT-ROBO Rho GTPase-activating protein 2 (srGAP2) (Formin-binding protein 2) (Rho GTPase-activating protein 34),FUNCTION: Postsynaptic RAC1 GTPase activating protein (GAP) that plays a key role in neuronal morphogenesis and migration mainly during development of the cerebral cortex (PubMed:20810653, PubMed:27373832, PubMed:28333212). Regulates excitatory and inhibitory synapse maturation and density in cortical pyramidal neurons (PubMed:22559944, PubMed:27373832). SRGAP2/SRGAP2A limits excitatory and inhibitory synapse density through its RAC1-specific GTPase activating activity, while it promotes maturation of both excitatory and inhibitory synapses through its ability to bind to the postsynaptic scaffolding protein HOMER1 at excitatory synapses, and the postsynaptic protein GPHN at inhibitory synapses (By similarity). Mechanistically, acts by binding and deforming membranes, thereby regulating actin dynamics to regulate cell migration and differentiation (PubMed:27373832). Promotes cell repulsion and contact inhibition of locomotion: localizes to protrusions with curved edges and controls the duration of RAC1 activity in contact protrusions (By similarity). In non-neuronal cells, may also play a role in cell migration by regulating the formation of lamellipodia and filopodia (PubMed:20810653, PubMed:21148482).</p> <p>{ECO:0000250 UniProtKB:Q91Z67, ECO:0000269 PubMed:20810653,</p>

Target Details

ECO:0000269|PubMed:21148482, ECO:0000269|PubMed:22559944,
ECO:0000269|PubMed:27373832, ECO:0000269|PubMed:28333212}.

Molecular Weight: 120.9 kDa

UniProt: [O75044](#)

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)



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