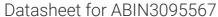
# antibodies .- online.com





# SRGAP2 Protein (AA 1-1071) (Strep Tag)



#### 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 LRVQLLQDLQ DFFRKKAEIE MDYSRNLEKL AERFLAKTRS TKDQQFKKDQ NVLSPVNCWN LLLNQVKRES RDHTTLSDIY LNNIIPRFVQ VSEDSGRLFK KSKEVGQQLQ DDLMKVLNEL YSVMKTYHMY NADSISAQSK LKEAEKQEEK QIGKSVKQED RQTPRSPDST ANVRIEEKHV RRSSVKKIEK MKEKRQAKYT ENKLKAIKAR NEYLLALEAT NASVFKYYIH DLSDLIDQCC DLGYHASLNR ALRTFLSAEL NLEOSKHEGL DAIENAVENL DATSDKORLM EMYNNVFCPP MKFEFOPHMG DMASOLCAOO PVQSELVQRC QQLQSRLSTL KIENEEVKKT MEATLQTIQD IVTVEDFDVS DCFQYSNSME SVKSTVSETF MSKPSIAKRR ANQQETEQFY FTKMKEYLEG RNLITKLQAK HDLLQKTLGE SQRTDCSLAR RSSTVRKQDS SQAIPLVVES CIRFISRHGL QHEGIFRVSG SQVEVNDIKN AFERGEDPLA GDQNDHDMDS IAGVLKLYFR GLEHPLFPKD IFHDLMACVT MDNLQERALH IRKVLLVLPK TTLIIMRYLF AFLNHLSQFS EENMMDPYNL AICFGPSLMS VPEGHDQVSC QAHVNELIKT IIIQHENIFP SPRELEGPVY SRGGSMEDYC DSPHGETTSV EDSTQDVTAE

HHTSDDECEP IEAIAKFDYV GRTARELSFK KGASLLLYQR ASDDWWEGRH NGIDGLIPHQ YIVVQDTEDG VVERSSPKSE IEVISEPPEE KVTARAGASC PSGGHVADIY LANINKQRKR PESGSIRKTF RSDSHGLSSS LTDSSSPGVG ASCRPSSQPI MSQSLPKEGP DKCSISGHGS LNSISRHSSL KNRLDSPQIR KTATAGRSKS FNNHRPMDPE VIAQDIEATM NSALNELREL ERQSSVKHTP DVVLDTLEPL KTSPVVAPTS EPSSPLHTQL LKDPEPAFQR SASTAGDIAC AFRPVKSVKM 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 posttranslational 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 (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.
- 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)

## Target Details

Target:

SRGAP2

Alternative Name:

SRGAP2 (SRGAP2 Products)

#### Background:

SLIT-ROBO Rho GTPase-activating protein 2 (srGAP2) (Formin-binding protein 2) (Rho GTPaseactivating 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). {ECO:0000250|UniProtKB:Q91Z67, ECO:0000269|PubMed:20810653, ECO:0000269|PubMed:21148482, ECO:0000269|PubMed:22559944,

Order at www.antibodies-online.com | www.antikoerper-online.de | www.anticorps-enligne.fr | www.antibodies-online.cn | International: +49 (0)241 95 163 153 | USA & Canada: +1 877 302 8632 | support@antibodies-online.com | Page 3/4 | Product datasheet for ABIN3095567 | 05/07/2024 | Copyright antibodies-online. All rights reserved.

# **Target Details**

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	ECO:0000269 PubMed:27373832, ECO:0000269 PubMed:283333212}.
Molecular Weight:	120.9 kDa
UniProt:	075044
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)