

# Datasheet for ABIN7564827 SRGAP2 Protein (AA 1-1071) (His tag)



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Quantity:	1 mg
Target:	SRGAP2
Protein Characteristics:	AA 1-1071
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This SRGAP2 protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB)

Purpose:	Custom-made recombinat Srgap2 Protein expressed in mammalien cells.
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 DLSDIIDQCC DLGYHASLNR ALRTFLSAEL
	NLEQSKHEGL DAIENAVENL DATSDKQRLM EMYNNVFCPP MKFEFQPHMG DMASQLCAQQ
	PVQSELVQRC QQLQSRLSTL KIENEEVKKT MEATLQTIQD IVTVEDFDVS DCFQYSNSME
	SVKSTVSETF MSKPSIAKRR ANQQETEQFY FTKMKEYLEG RNLITKLQAK HDLLQKTLGE
	SQRTDCSLAR RSSTVRKQDS SQAIPLVVES CIRFISRHGL QHEGIFRVSG SQVEVNDIKN
	AFERGEDPLA GDQNDHDMDS IAGVLKLYFR GLEHPLFPKD IFHDLIACVT MDNLQERAVH
	IRKVLLVLPK PTLIIMRYLF AFLNHLSQFS EENMMDPYNL AICFGPSLMS VPEGHDQVSC

QAHVNELIKT IIIQHENIFP NPRELEGPIY SRGGSMEDYC DSTHGETTSA EDSTQDVTAE
HHTSDDECEP IEAIAKFDYV GRTARELSFK KGASLLLYQR ASDDWWEGRH NGIDGLIPHQ
YIVVQDTEDG VVERSSPKSE IEVMSEPPEE KVTARTGASC PSGGHVADIY LANINKQRKR
PESGSIRKAF RSDSHGLGSS LTDSSSLGVG ASCRPSSQPI MSQNLPKEGP DKCSISGHGS
LNSISRHSSL KNRMDSPQIR KTATAGRSKS FNNHRPMDPE VIAQDIEATM NSALNELQEL
ERQSSAKHTP DVVLDTLEPL KTSPVVAPTS EPSSPLHTQL LKDPEPAFQR SASTAGDIAC
AFRPVKSVKM AAPVKPPATR PKPTVFPKTN ATSPGVNSSA SPQATDKSCT V Sequence without
tag. The proposed Purification-Tag is based on experiences 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 to order protein from design to production by highly experienced protein experts.
- Protein expressed in mammalien cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- · 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.

If you are not interested in a full length protein, please contact us for individual protein fragments.

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.

## Purity:

> 90 % as determined by Bis-Tris Page, Western Blot

#### Grade:

custom-made

### **Target Details**

Target:	SRGAP2	
Alternative Name:	Srgap2 (SRGAP2 Products)	
Background:	SLIT-ROBO Rho GTPase-activating protein 2 (srGAP2) (Formin-binding protein 2) (Formin-binding protein 27) (FBP-27),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:19737524, PubMed:22559944, PubMed:27373832). Regulates excitatory and inhibitory synapse maturation and density in cortical pyramidal neurons (PubMed:19737524, 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 (PubMed:27373832). Mechanistically, acts by binding and deforming membranes, thereby regulating actin dynamics to regulate cell migration and differentiation (PubMed:19737524, PubMed:22559944, PubMed:26439400). Promotes cell repulsion and contact inhibition of locomotion: localizes to protrusions with curved edges and controls the duration of RAC1 activity in contact protrusions (PubMed:26439400). In non-neuronal cells, may also play a role in cell migration by regulating the formation of lamellipodia and filopodia (PubMed:22559944). [ECO:0000269|PubMed:19737524, ECO:0000269|PubMed:27373832}.

Molecular Weight: 120.8 kDa

UniProt: Q91Z67

### **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.

Restrictions: For Research Use only

#### Handling

Format:	Liquid	
Buffer:	The buffer composition is at the discretion of the manufacturer.	
Handling Advice:	Avoid repeated freeze-thaw cycles.	
Storage:	-80 °C	
Storage Comment:	Store at -80°C.	
Expiry Date:	12 months	