

Datasheet for ABIN3092824

RASGRP1 Protein (AA 1-797) (Strep Tag)



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Overview

Quantity:	250 µg
Target:	RASGRP1
Protein Characteristics:	AA 1-797
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This RASGRP1 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Brand:	AliCE®
Sequence:	<p>MGTLGKAREA PRKPSHGCR AASKARLEAKP ANSPFSPSHPS LAHITQFRMM VSLGHLAKGA</p> <p>SLDDLIDSCI QSFADAGNLC RSNQLLQVML TMHRIVISSA ELLQKVITLY KDALAKNSPG</p> <p>LCLKICYFVR YWITEFWVMF KMDASLTDTM EEFQELVKAK GEELHCRLID TTQINARDWS</p> <p>RKLTQRIKSN TSKKRKVSL FDHLEPEELS EHLTYLEFKS FRRISFSDYQ NYLVNSCVKE</p> <p>NPTMERSIAL CNGISQWVQL MVLSRPTPQL RAEVFIKFIQ VAQKLHQLQN FNTLMAVIGG</p> <p>LCHSSISRLK ETSSHVPHEI NKVLGEMTEL LSSSRNYDNY RRAYGECTDF KIPILGVHLK</p> <p>DLISLYEAMP DYLEDGKVVV HKLLALYNHI SELVQLQEVA PPLEANKDLV HLLTSLDLTY</p> <p>YTEDEIYELS YAREPRNHRA PPLTPSKPPV VVDWASGVSP KPDPKTISKH VQRMVDSVFK</p> <p>NYDHDQDGYI SQEEFEKIAA SFPFSFCVMD KDREGLISRD EITAYFMRAS SIYSKLGGLGF</p> <p>PHNFQETTYL KPTFCDCNAG FLWGVKQGY RCKDCGMNCH KQCKDLVFE CKKRAKNPVA</p> <p>PTENNTSVGP VSNLCSLGAK DLLHAPEEGP FTFPNGEAVE HGEESKDRTI MLMGVSSQKI</p>

SLRLKRAVAH KATQTESQPW IGSEGPSGPF VLSSPRKTAQ DTLVVLPSPT SPCPSPVLVR
KRAFKWENK DSLIKSKEEL RHLRLPTYQE LEQEINTLKA DNDALKIQLK YAQKKIESLQ
LEKSNHVLAQ MEQGDCS

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

Product Details

	System (AliCE®).
Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).
Grade:	custom-made

Target Details

Target:	RASGRP1
Alternative Name:	RASGRP1 (RASGRP1 Products)
Background:	<p>RAS guanyl-releasing protein 1 (Calcium and DAG-regulated guanine nucleotide exchange factor II) (CaDAG-GEFII) (Ras guanyl-releasing protein),FUNCTION: Functions as a calcium- and diacylglycerol (DAG)-regulated nucleotide exchange factor specifically activating Ras through the exchange of bound GDP for GTP (PubMed:15899849, PubMed:23908768, PubMed:27776107, PubMed:29155103). Activates the Erk/MAP kinase cascade (PubMed:15899849). Regulates T-cell/B-cell development, homeostasis and differentiation by coupling T-lymphocyte/B-lymphocyte antigen receptors to Ras (PubMed:10807788, PubMed:12839994, PubMed:27776107, PubMed:29155103). Regulates NK cell cytotoxicity and ITAM-dependent cytokine production by activation of Ras-mediated ERK and JNK pathways (PubMed:19933860). Functions in mast cell degranulation and cytokine secretion, regulating FcERI-evoked allergic responses. May also function in differentiation of other cell types (PubMed:12845332). {ECO:0000250 UniProtKB:Q9Z1S3, ECO:0000269 PubMed:10807788, ECO:0000269 PubMed:12782630, ECO:0000269 PubMed:12839994, ECO:0000269 PubMed:12845332, ECO:0000269 PubMed:15060167, ECO:0000269 PubMed:15184873, ECO:0000269 PubMed:15899849, ECO:0000269 PubMed:19933860, ECO:0000269 PubMed:23908768, ECO:0000269 PubMed:27776107, ECO:0000269 PubMed:29155103}.</p>
Molecular Weight:	90.4 kDa
UniProt:	O95267
Pathways:	TCR Signaling, Fc-epsilon Receptor Signaling Pathway

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.
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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