Datasheet for ABIN3095122

GRF2 Protein (AA 1-1077) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	GRF2 (RAPGEF1)
Protein Characteristics:	AA 1-1077
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This GRF2 protein is labelled with Strep Tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB), ELISA

Product Details

Brand:	AliCE®
Sequence:	MDTDSQRSHL SSFTMKLMDK FHSPKIKRTP SKKGKPAEVS VKIPEKPVNK EATDRFLPEG YPLPLDLEQQ AVEFMSTSAV ASRSQRQKNL SWLEEKEKEV VSALRYFKTI VDKMAIDKKV LEMLPGSASK VLEAILPLVQ NDPRIQHSSA LSSCYSRVYQ SLANLIRWSD QVMLEGVNSE DKEMVTTVKG VIKAVLDGVK ELVRLTIEKQ GRPSPTSPVK PSSPASKPDG PAELPLTDRE VEILNKTTGM SQSTELLPDA TDEEVAPPKP PLPGIRVVDN SPPPALPPKK RQSAPSPTRV AVVAPMSRAT SGSSLPVGIN RQDFDVDCYA QRRLSGGSHS YGGESPRLSP CSSIGKLSKS DEQLSSLDRD SGQCSRNTSC ETLDHYDPDY EFLQQDLSNA DQIPQQTAWN LSPLPESLGE SGSPFLGPPF QLPLGGHPQP DGPLAPGQQT DTPPALPEKK RRSAASQTAD GSGCRVSYER HPSQYDNISG EDLQSTAPIP SVPYAPFAAI LPFQHGGSSA PVEFVGDFTA PESTGDPEKP PPLPEKKNKH MLAYMQLLED YSEPQPSMFY QTPQNEHIYQ QKNKLLMEVY GFSDSFSGVD SVQELAPPPA LPPKQRQLEP PAGKDGHPRD PSAVSGVPGK DSRDGSERAP KSPDALESAQ

SEEEVDELSL IDHNEIMSRL TLKQEGDDGP DVRGGSGDIL LVHATETDRK DLVLYCEAFL TTYRTFISPE ELIKKLQYRY EKFSPFADTF KKRVSKNTFF VLVRVVDELC LVELTEEILK LLMELVFRLV CNGELSLARV LRKNILDKVD QKKLLRCATS SQPLAARGVA ARPGTLHDFH SHEIAEQLTL LDAELFYKIE IPEVLLWAKE QNEEKSPNLT QFTEHFNNMS YWVRSIIMLQ EKAQDRERLL LKFIKIMKHL RKLNNFNSYL AILSALDSAP IRRLEWQKQT SEGLAEYCTL IDSSSSFRAY RAALSEVEPP CIPYLGLILQ DLTFVHLGNP DYIDGKVNFS KRWQQFNILD SMRCFQQAHY DMRRNDDIIN FFNDFSDHLA EEALWELSLK IKPRNITRRK TDREEKT

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.

Product Details

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

Target Details

Target:	GRF2 (RAPGEF1)
Alternative Name:	RAPGEF1 (RAPGEF1 Products)
Background:	Rap guanine nucleotide exchange factor 1 (CRK SH3-binding GNRP) (Guanine nucleotide-releasing factor 2) (Protein C3G),FUNCTION: Guanine nucleotide-releasing protein that binds to SH3 domain of CRK and GRB2/ASH. Transduces signals from CRK to activate RAS. Involved in cell branching and adhesion mediated by BCAR1-CRK-RAPGEF1 signaling and activation of RAP1 (PubMed:12432078). Plays a role in the establishment of basal endothelial barrier function. Plays a role in nerve growth factor (NGF)-induced sustained activation of Rap1 and neurite outgrowth. {ECO:0000269|PubMed:12432078, ECO:0000269|PubMed:17724123, ECO:0000269|PubMed:21840392, ECO:0000269|PubMed:7806500}.
Molecular Weight:	120.5 kDa
UniProt:	Q13905
Pathways:	Interferon-gamma Pathway, Neurotrophin Signaling Pathway, Platelet-derived growth Factor Receptor Signaling, Signaling of Hepatocyte Growth Factor Receptor

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.

Application Details

	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. 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