Datasheet for ABIN3135316

ARHGEF2 Protein (AA 1-985) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	ARHGEF2
Protein Characteristics:	AA 1-985
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This ARHGEF2 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Brand:	AliCE®
Sequence:	MSRIESLTRA RIDRSKEQAT KTREKEKMKE AKDARYTNGH LFTTISVSGM TMCYACNKSI TAKEALICPT CNVTIHNRCK DTLANCTKVK QKQQKAALLR NNTALQSVSL RSKTTTRERP TSAIYPSDSF RQSLLGSRRG LSSLSLAKSV STTNIAGHFN DESPLGLRQI LSQSTDSLNM RNRTLSVESL IDEGVEVFYN ELMSDFEMDE KDFEADSWSL AVDSSFLQQH KKEVMKKQDV IYELIQTELH HVRTLKIMTR LFRTGMLEEL QMEPEVVQGL FPCVDELSDI HTRFLNQLLE RRRQALCPGS TRNFVIHRLG DLLISQFSGS NAEQMRKTYS EFCSRHTKAL KLYKELYARD KRFQQFIRKM TRSAVLKRHG VQECILLVTQ RITKYPVLIN RILQNSHGVE EEYQDLASAL GLVKELLSNV DQDVHELEKE ARLQEIYNRM DPRAQTPVPG KGPFGRDELL RRKLIHEGCL LWKTATGRFK DVLLLLMTDV LVFLQEKDQK YIFTSLDKPS VVSLQNLIVR DIANQAKGMF LISSGPPEMY EVHAASRDDR TTWIRVIQQS VRLCPSREDF PLIETEDKAY LRRIKTKLQQ KNQALVELLQ KNVELFAEMV HFQALKAGFV GMPPPALPRG LFRLESFESL RGERLLKDAL

REVEGLKDLL LGPCVDLPMT SREPALPLDS DSGSCPGVTA NGEARTFNGS IELCRADSDS SQKDRNGNQL RSPQEEVLQP LINLYGLLHG LQAVVVQQER LMEALFPEGP ERWEKLSRAN SRDGEAGRAA VASVTPEKQA TELALLQRQH TLLQEELRRC QRLGEERATE AGSLEARLRE SEQARALLER EAEEIRRQLA ALGQNEPLPA EAPWARRPLD PRRRSLPAGD ALYLSFNPPQ PSRGHDRLDL PVTVRSLHRP FDDREAQELG SPEDRLQDSS DPDTGSEEEV SSRLSPPHSP RDFTRMQDIP EETESRDGEP TASES

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.

Product Details

- 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:	ARHGEF2
Alternative Name:	Arhgef2 (ARHGEF2 Products)
Background:	Rho guanine nucleotide exchange factor 2 (Guanine nucleotide exchange factor H1) (GEF-H1) (LBC'S first cousin) (Lymphoid blast crisis-like 1) (Oncogene LFC) (Rhobin),FUNCTION: Activates Rho-GTPases by promoting the exchange of GDP for GTP. May be involved in epithelial barrier permeability, cell motility and polarization, dendritic spine morphology, antigen presentation, leukemic cell differentiation, cell cycle regulation, innate immune response, and cancer. Binds Rac-GTPases, but does not seem to promote nucleotide exchange activity toward Rac-GTPases. May stimulate instead the cortical activity of Rac. Inactive toward CDC42, TC10, or Ras-GTPases. Forms an intracellular sensing system along with NOD1 for the detection of microbial effectors during cell invasion by pathogens. Involved in innate immune signaling transduction pathway promoting cytokine IL6/interleukin-6 and TNF-alpha secretion in macrophage upon stimulation by bacterial peptidoglycans, acts as a signaling intermediate between NOD2 receptor and RIPK2 kinase. Contributes to the tyrosine phosphorylation of RIPK2 through Src tyrosine kinase leading to NF-kappaB activation by NOD2. Overexpression activates Rho-, but not Rac-GTPases, and increases paracellular permeability (By similarity). Involved in neuronal progenitor cell division and differentiation (PubMed:28453519). Involved in the migration of precerebellar neurons (PubMed:28453519). {ECO:0000250|UniProtKB:Q865S3, ECO:0000250|UniProtKB:Q92974, ECO:0000269|PubMed:28453519}.
Molecular Weight:	112.0 kDa
UniProt:	Q60875
Pathways:	Negative Regulation of intrinsic apoptotic Signaling

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. 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