Datasheet for ABIN3089110

ARHGEF7 Protein (AA 1-803) (Strep Tag)

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1 Image

Overview

Quantity:	1 mg
Target:	ARHGEF7
Protein Characteristics:	AA 1-803
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This ARHGEF7 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

Product Details

Sequence:	MNSAEQTVTW LITLGVLESP KKTISDPEGF LQASLKDGVV LCRLLERLLP GTIEKVYPEP RSESECLSNI REFLRGCGAS LRLELLFPPS QPPQHLVTTI LLSASTFDAN DLYQGQNFNK VLSSLVTLNK VTADIGLGSD SVCARPSSHR IKSFDSLGSQ SLHTRTSKLF QGQYRSLDMT DNSNNQLVVR AKFNFQQTNE DELSFSKGDV IHVTRVEEGG WWEGTLNGRT GWFPSNYVRE VKASEKPVSP KSGTLKSPPK GFDTTAINKS YYNVVLQNIL ETENEYSKEL QTVLSTYLRP LQTSEKLSSA NISYLMGNLE EICSFQQMLV QSLEECTKLP EAQQRVGGCF LNLMPQMKTL YLTYCANHPS AVNVLTEHSE ELGEFMETKG ASSPGILVLT TGLSKPFMRL DKYPTLLKEL ERHMEDYHTD RQDIQKSMAA FKNLSAQCQE VRKRKELELQ ILTEAIRNWE GDDIKTLGNV TYMSQVLIQC AGSEEKNERY LLLFPNVLLM LSASPRMSGF IYQGKLPTTG MTITKLEDSE NHRNAFEISG SMIERILVSC NNQQDLQEWV EHLQKQTKVT SVGNPTIKPH SVPSHTLPSH PVTPSSKHAD SKPAPLTPAY HTLPHPSHHG TPHTTINWGP LEPPKTPKPW SLSCLRPAPP LRPSAALCYK EDLSKSPKTM KKLLPKRKPE RKPSDEEFAS RKSTAALEED AQILKVIEAY

CTSAKTRQTL NSTWQGTDLM HNHVLADDDQ PSLDSLGRRS SLSRLEPSDL SEDSDYDSIW TAHSYRMGST SRKSCCSYIS HQN

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 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 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.

Product Details

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. 2. 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)
Grade:	Crystallography grade

Target Details

Target:	ARHGEF7
Alternative Name:	ARHGEF7 (ARHGEF7 Products)
Background:	Rho guanine nucleotide exchange factor 7 (Beta-Pix) (COOL-1) (PAK-interacting exchange factor beta) (p85),FUNCTION: Acts as a RAC1 guanine nucleotide exchange factor (GEF) and can induce membrane ruffling. Functions in cell migration, attachment and cell spreading. Promotes targeting of RAC1 to focal adhesions (By similarity). May function as a positive regulator of apoptosis. Downstream of NMDA receptors and CaMKK-CaMK1 signaling cascade, promotes the formation of spines and synapses in hippocampal neurons. {ECO:0000250, ECO:0000269|PubMed:18184567, ECO:0000269|PubMed:18716323, ECO:0000269|PubMed:19041750}.
Molecular Weight:	90.0 kDa
UniProt:	Q14155
Pathways:	EGFR Signaling Pathway, Neurotrophin Signaling Pathway, EGFR Downregulation

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

Application Details

	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)

Images

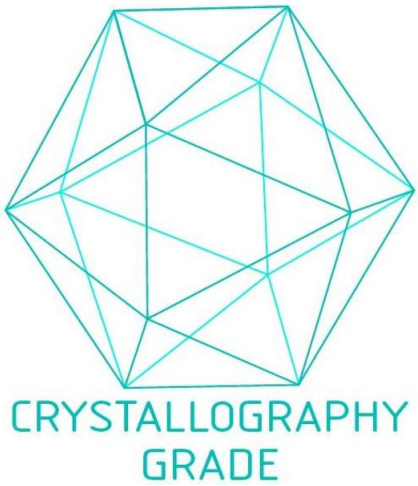

Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process