Datasheet for ABIN3089361

ARHGEF1 Protein (AA 1-912) (Strep Tag)

Go to Product page

Overview

Quantity:	1 mg
Target:	ARHGEF1
Protein Characteristics:	AA 1-912
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This ARHGEF1 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Sequence:	MEDFARGAAS PGPSRPGLVP VSIIGAEDED FENELETNSE EQNSQFQSLE QVKRRPAHLM ALLQHVALQF EPGPLLCCLH ADMLGSLGPK EAKKAFLDFY HSFLEKTAVL RVPVPPNVAF ELDRTRADLI SEDVQRRFVQ EVVQSQQVAV GRQLEDFRSK RLMGMTPWEQ ELAQLEAWVG RDRASYEARE RHVAERLLMH LEEMQHTIST DEEKSAAVVN AIGLYMRHLG VRTKSGDKKS GRNFFRKKVM GNRRSDEPAK TKKGLSSILD AARWNRGEPQ VPDFRHLKAE VDAEKPGATD RKGGVGMPSR DRNIGAPGQD TPGVSLHPLS LDSPDREPGA DAPLELGDSS PQGPMSLESL APPESTDEGA ETESPEPGDE GEPGRSGLEL EPEEPPGWRE LVPPDTLHSL PKSQVKRQEV ISELLVTEAA HVRMLRVLHD LFFQPMAECL FFPLEELQNI FPSLDELIEV HSLFLDRLMK RRQESGYLIE EIGDVLLARF DGAEGSWFQK ISSRFCSRQS FALEQLKAKQ RKDPRFCAFV QEAESRPRCR RLQLKDMIPT EMQRLTKYPL LLQSIGQNTE EPTEREKVEL AAECCREILH HVNQAVRDME DLLRLKDYQR RLDLSHLRQS SDPMLSEFKN LDITKKKLVH EGPLTWRVTK DKAVEVHVLL LDDLLLLLQR QDERLLLKSH SRTLTPTPDG KTMLRPVLRL TSAMTREVAT

DHKAFYVLFT WDQEAQIYEL VAQTVSERKN WCALITETAG SLKVPAPASR PKPRPSPSST REPLLSSSEN GNGGRETSPA DARTERILSD LLPFCRPGPE GQLAATALRK VLSLKQLLFP AEEDNGAGPP RDGDGVPGGG PLSPARTQEI QENLLSLEET MKQLEELEEE FCRLRPLLSQ LGGNSVPQPG CT

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.

Product Details

- We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.

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)

Target Details

Target:	ARHGEF1
Alternative Name:	ARHGEF1 (ARHGEF1 Products)
Background:	Rho guanine nucleotide exchange factor 1 (115 kDa guanine nucleotide exchange factor) (p115-RhoGEF) (p115RhoGEF) (Sub1.5),FUNCTION: Seems to play a role in the regulation of RhoA GTPase by guanine nucleotide-binding alpha-12 (GNA12) and alpha-13 (GNA13) subunits (PubMed:9641915, PubMed:9641916). Acts as a GTPase-activating protein (GAP) for GNA12 and GNA13, and as guanine nucleotide exchange factor (GEF) for RhoA GTPase (PubMed:9641915, PubMed:9641916, PubMed:8810315, PubMed:30521495). Activated G alpha 13/GNA13 stimulates the RhoGEF activity through interaction with the RGS-like domain (PubMed:9641916). This GEF activity is inhibited by binding to activated GNA12 (PubMed:9641916). Mediates angiotensin-2-induced RhoA activation (PubMed:20098430). {ECO:0000269|PubMed:20098430, ECO:0000269|PubMed:30521495, ECO:0000269|PubMed:8810315, ECO:0000269|PubMed:9641915, ECO:0000269|PubMed:9641916}.
Molecular Weight:	102.4 kDa
UniProt:	Q92888
Pathways:	Neurotrophin Signaling Pathway, Regulation of G-Protein Coupled Receptor Protein Signaling, Thromboxane A2 Receptor 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. 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)