Datasheet for ABIN3131163

ARHGEF5 Protein (AA 1-1581) (His tag)

Go to Product page

1 Image

Overview

Quantity:	1 mg
Target:	ARHGEF5
Protein Characteristics:	AA 1-1581
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This ARHGEF5 protein is labelled with His tag.
Application:	ELISA, Western Blotting (WB), Crystallization (Crys), SDS-PAGE (SDS)

Product Details

Sequence:	MEAEEPEYGV STEVPDIEEL KTIPEGIMRS SQIPALDPEA QEDRDPSYKW TDGHRPVMNQ SKVLRDMGDH TPNSMAIFFK KESSDMETSQ EILLAEACNT PDQQEAVIQS LKDRLSRTIA APELLACAVQ EEWLDIPSKL DNRVGAELQS ELMSLTLAVS KEKEEEETSP DTSIPRGSWP PCKTHPGETE QTQGSGSELL RQGKQLQLEA TQENQGQEGF LQSQEAQGLE EQEGQEVEIQ EEGTLNEGIC FGGLLGEQEE VEEGFNGNEE EQKQGQIQSY MLLGGQWENE GLSGELEGLN YSERGQENRE RRVWVLRDSE EEGQDQESRE VEERRVATQY TENQRLVEKS EIVKRKQRDH DQTGKVMPVR DQKEVVDSGD RVQGNGDSGG QTAVEGSRPG EDSKPSLPVA SVDPEVLSPG TLFPGISSSV ADIPQIQKEP VCEELSPQAP ALEPTEWSHQ PISPPASFAP EESLDNRTHN SQQEEFRLRK GIEVVSASTS VAPSGTRDSP PFSPPNVFSS TATLSPVSSS VILPEETPTA SASADTPHHC GPCETPPLPA KSSRYPCATS DTANPHSPLS SYTGVTQHLR SNSFPGSHRT EQTPDSLGMS LSFSHLELPQ RPPKPAIYGS LTPRRNRRSR DGIVFSDSST ALFALKQDSE EFTSNPERPS SPHGSPTWGS PQNSAFAIGS PANVSSPPTV SMDMTIREAL LPIPPEKRHS

YSHIVERDGL LHEVASTLKR HSHPPPLTLS SGLHRSSKGS FSLVPDSTVA RQHRPLPSTP ESPNHTQTSI PSRLRYNKPL PPTPDMPEFY HPSISSSYIS RMYRPLPPVP IIDPSSEPPP LPPKSRGRSK SIQGGVIHSG GQAKPRPNNQ DWTASTLSVG RTSWPPATGR STESLPLTSR CNNEVSPGLA FSNMTNLLSP SSPTTPWIPD LQRPTTKDES GLTEESEPPV RGSFRRSAPQ EEFNNTRRSA LGSRKNSEKP LHHQLEKASS WPHRRDPART SESSSEQVVL GQVPNKQKGW NRQGLRRPSI LPESSSDLRN PAAGRLPGSS DSVVFREKKP KEGMGGFSRR CSKLISSQLL YQEYSDVVLN KEIQSQQRLD SLAEPHGLSS PRHRRKALVS SDSYLQRLSM ASSGSLWQEI PVVRNSTVLL SMTHEDQKLQ EAKFELIVSE ASYLRSLNIA VDHFQHSAQL RGTLSNQDHQ WLFSRLQDVR DVSTTFLSDL EENFENNIFS FQVCDVVLNH AADFHRVYLP YVTNQTYQER TFQSLMNSNS SFREVLEKLE SDPICQRLSL KSFLILPFQR ITRLKLLLQN ILKRTQPGSS EEAEATKAHH ALEKLIRDCN SNVQRMRRTE ELIYLSQKIE FECKIFPLIS QSRWLVKSGE LTALEFSVSP GLRRKLTTRP VHLHLFNDCL LLSRPREGSR FLVFDHAPFS SIRGEKCEMK LHGPHKNLFR LFLLHNAQGT QVEFLFRTET QSEKLRWISA LAMPREELDL LECYDSPQVQ CLRAYKPREN DELALEKADV VMVTQQSSDG WLEGVRLSDG EQGWFPVQQV EFISNPEVRA QNLKEAHRVK TAKLQLVEQQ V

Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.

Characteristics:

- Made in Germany - from design to production - by highly experienced protein experts.
- Mouse Arhgef5 Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade.
- 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.

In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization).

When you order this made-to-order protein you will only pay upon receival of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered.

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

Product Details

	specific reference buffer. The concentration of the protein is calculated using its specific absorption coefficient. We use the Expasy's protparam tool to determine the absorption coefficient of each protein.
Purification:	Two step purification of proteins expressed in baculovirus infected SF9 insect cells: 1. In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. 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:	>95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Sterility:	0.22 µm filtered
Endotoxin Level:	Protein is endotoxin free.
Grade:	Crystallography grade

Target Details

Target:	ARHGEF5
Alternative Name:	Arhgef5 (ARHGEF5 Products)
Background:	Guanine nucleotide exchange factor which activates Rho GTPases (PubMed:19713215, PubMed:21525037). Strongly activates RHOA (PubMed:19713215, PubMed:21525037). Also strongly activates RHOB, weakly activates RHOC and RHOG and shows no effect on RHOD, RHOV, RHOQ or RAC1 (PubMed:19713215). Involved in regulation of cell shape and actin cytoskeletal organization (PubMed:21525037). Plays a role in actin organization by generating a loss of actin stress fibers and the formation of membrane ruffles and filopodia (By similarity). Required for SRC-induced podosome formation (PubMed:21525037). Involved in positive regulation of immature dendritic cell migration (PubMed:19713215). {ECO:0000250|UniProtKB:Q12774, ECO:0000269|PubMed:19713215, ECO:0000269|PubMed:21525037}.
Molecular Weight:	177.6 kDa Including tag.
UniProt:	E9Q7D5

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 gurantee though.
Comment:	Protein has not been tested for activity yet. In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you receive your protein of interest.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value is at the discretion of the manufacturer.
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