

Datasheet for ABIN3089056

**ARHGEF5 Protein (AA 1-1597) (His tag)**[Go to Product page](#)**1** Image

## Overview

|                               |  |
|-------------------------------|--|
| Quantity:                     | 1 mg   |
| Target:                       | ARHGEF5  |
| Protein Characteristics:      | AA 1-1597  |
| Origin:                       | Human  |
| 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: | MEAEAAQRGA SPPISAIIEF SIPEAPMRS SQVSALGLEA QEDEDPSYKW REEHRLSATQ<br>QSELRDVCDY AIETMPSFPK EGSADVEPNQ ESLVAEACDT PEHWEAVPQS LAGRQARTLA<br>PPELWACPIQ SEHLDMAPFS SDLGSEEEV EFWPGLTSLT LGSGQAESEE ETSSDNSGQT<br>RYYSPCEEHP AETNQNEGSE SGTIRQGEEL PPEELQESQG LLHPQEVQVL EEQGQQEAGF<br>RGEGTLREDV CADGLLGEEQ MIEQVNDEKG EQKQKQEQVQ DVMLGRQGER MGLTGEPEGL<br>NDGEWEQEDM ERKAQGQGGP EQGEERKREL QVPEENRADS QDEKSQTFLG KSEEVTKGQE<br>DHGIKEKGVP VSGQEAKEPE SWDGGRLGAV GRARSREEN EHHGSPMPAL IAPEDSPHCD<br>LFPGASYLMT QIPGTQTESR AEELSPAALS PSLEPIRCSH QPISLLGSFL TEESPDKEID<br>QNSQQEESRL RKGTVSSQGT EVVFASASVT PPRTPDAPP SPAEAYPITP ASVSARPPVA<br>FPRRETSCAA RAPETASAPL SMDDPSPCGT SEMCPAALYG FPSTGTSPPR PPANSTGTVQ<br>HLRSDSFPGS HRTEQTPDLV GMLLSYSHSE LPQRPPKPAI YSSVTPRRDR RSGRDYSTVS<br>ASPTALSTLK QDSQESISNL ERPSSPPSIQ PWVSPHNPAF ATESPAYGSS PSFVSMEDVR |
|-----------|--|

IHEPLPPPPP QRRDTHPSV ETDG HARVVV PTLKQHSHP PLALGSLHA PHKGPLPQAS  
DPAVARQHRP LPSTPDSSH AQATPRWRYN KPLPPTDLP QPHLPPISAP GSSRIYRPLP  
PLIIDPPTTE PPPLPPKSRG RSRSTRGGHM NSGGHAKTRP ACQDWTVPLP ASAGRTSWPP  
ATARSTESFT STSRKSEVS PGMAFSNMTN FLCPSSTTP WTPELQGPTS KDEAGVSEHP  
EAPAREPLRR TTPQQGASGP GRSPVGQARQ PEKPSHLHLE KASSWPHRRD SGRPPGDSSG  
QAVAPSEGAN KHKGWSRQGL RRP SILPEGS SDSRGP AVEK HPGPSD TVVF REKKPK EVMG  
GFSRRCSKLI NSSQLLYQEY SDVVLNKEIQ SQQRLESLSE TPGPSSRPQP RKALVSSSEY  
LQRLSMASG SLWQEIPVVR NSTVLLSMTH EDQKLQEVKF ELIVSEASYL RSLNIAVDHF  
QLSTSLRATL SNQEHQWLFS RLQDVRDVSA TFLSDLEENF ENNIFSFQVC DVVLNHAPDF  
RRVYLPYVTN QTYQERTFQS LMNSNSNFRE VLEKLESDPV CQRLSLKSFL ILPFQRITRL  
KLLLQNILKR TQPGSSEAE ATKAHHALEQ LIRDCNNNVQ SMRRTTELIY LSQKIEFECK  
IFPLISQSRW LVKSGELTAL EFSASPLRR KLNTRPVHLH LFNDCLLLSR PREGSRFLVF  
DHAPFSSIRG EKCEMKLHGP HKNLFRFLR QNTQGAQAEF LFRTEQSEK LRWISALAMP  
REELDLLECY NSPQVCLRA YKPRENDELA LEKADVMMVT QQSSDGWLEG VRLSDGERGW  
FPVQQVEFIS NPEVRAQNLK EAHRVKTAKL QLVEQQA

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

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### Characteristics:

- Made in Germany - from design to production - by highly experienced protein experts.
- Human 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 receipt 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:<br><br>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.<br><br>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 ( <a href="#">ARHGEF5 Products</a> )  |
| Background:       | Guanine nucleotide exchange factor which activates Rho GTPases (PubMed:15601624). Strongly activates RHOA (PubMed:15601624). Also strongly activates RHOB, weakly activates RHOC and RHOG and shows no effect on RHOD, RHOV, RHOQ or RAC1 (By similarity). Involved in regulation of cell shape and actin cytoskeletal organization (PubMed:15601624). Plays a role in actin organization by generating a loss of actin stress fibers and the formation of membrane ruffles and filopodia (PubMed:14662653). Required for SRC-induced podosome formation (By similarity). Involved in positive regulation of immature dendritic cell migration (By similarity). {ECO:0000250 UniProtKB:E9Q7D5, ECO:0000269 PubMed:14662653, ECO:0000269 PubMed:15601624}. |
| Molecular Weight: | 177.8 kDa Including tag.  |
| UniProt:          | <a href="#">Q12774</a>  |

## Application Details

|                    |   |
|--------------------|---|
| Application Notes: | In addition to the applications listed above we expect the protein to work for functional studies |
|--------------------|---|

## Application Details

as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

**Comment:** 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