

# Datasheet for ABIN7563886 ARHGEF2 Protein (AA 1-985) (His tag)



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Quantity:	1 mg	
Target:	ARHGEF2	
Protein Characteristics:	AA 1-985	
Origin:	Mouse	
Source:	HEK-293 Cells	
Protein Type:	Recombinant	
Purification tag / Conjugate:	This ARHGEF2 protein is labelled with His tag.	
Application:	Western Blotting (WB), SDS-PAGE (SDS)	

Product Details	
Purpose:	Custom-made recombinat Arhgef2 Protein expressed in mammalien cells.
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 Purification-Tag is based on experiences 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 to order protein from design to production by highly experienced protein experts.
- · Protein expressed in mammalien cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- · 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.

If you are not interested in a full length protein, please contact us for individual protein fragments.

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.

### Purity:

> 90 % as determined by Bis-Tris Page, Western Blot

#### 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: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.

Restrictions: For Research Use only

# Handling

Format:

Buffer:
The buffer composition 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: 12 months