Datasheet for ABIN7552269

ARHGEF2 Protein (AA 1-986) (His tag)

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Overview

Quantity:	1 mg
Target:	ARHGEF2
Protein Characteristics:	AA 1-986
Origin:	Human
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 RIDRSRELAS KTREKEKMKE AKDARYTNGH LFTTISVSGM TMCYACNKSI TAKEALICPT CNVTIHNRCK DTLANCTKVK QKQQKAALLK NNTALQSVSL RSKTTIRERP SSAIYPSDSF RQSLLGSRRG RSSLSLAKSV STTNIAGHFN DESPLGLRRI LSQSTDSLNM RNRTLSVESL IDEAEVIYSE LMSDFEMDEK DFAADSWSLA VDSSFLQQHK KEVMKQQDVI YELIQTELHH VRTLKIMTRL FRTGMLEELH LEPGVVQGLF PCVDELSDIH TRFLSQLLER RRQALCPGST RNFVIHRLGD LLISQFSGPS AEQMCKTYSE FCSRHSKALK LYKELYARDK RFQQFIRKVT RPAVLKRHGV QECILLVTQR ITKYPLLISR ILQHSHGIEE ERQDLTTALG LVKELLSNVD EGIYQLEKGA RLQEIYNRMD PRAQTPVPGK GPFGREELLR RKLIHDGCLL WKTATGRFKD VLVLLMTDVL VFLQEKDQKY IFPTLDKPSV VSLQNLIVRD IANQEKGMFL ISAAPPEMYE VHTASRDDRS TWIRVIQQSV RTCPSREDFP LIETEDEAYL RRIKMELQQK DRALVELLRE KVGLFAEMTH FQAEEDGGSG MALPTLPRGL FRSESLESPR GERLLQDAIR

Product Details

	EVEGLKDLLV GPGVELLLTP REPALPLEPD SGGNTSPGVT ANGEARTFNG SIELCRADSD SSQRDRNGNQ LRSPQEEALQ RLVNLYGLLH GLQAAVAQQD TLMEARFPEG PERREKLCRA NSRDGEAGRA GAAPVAPEKQ ATELALLQRQ HALLQEELRR CRRLGEERAT EAGSLEARLR ESEQARALLE REAEEARRQL AALGQTEPLP AEAPWARRPV DPRRRSLPAG DALYLSFNPP QPSRGTDRLD LPVTTRSVHR NFEDRERQEL GSPEERLQDS SDPDTGSEEE GSSRLSPPHS PRDFTRMQDI PEETESRDGE AVASES **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) (Microtubule-regulated Rho-GEF) (Proliferating cell nucleolar antigen p40),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

Target Details

	Rac-GTPases, but does not seem to promote nucleotide exchange activity toward Rac-GTPases, which was uniquely reported in PubMed:9857026. 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. Required for RHOA and RIP2 dependent NF-kappaB signaling pathways activation upon S.flexneri cell invasion. Involved not only in sensing peptidoglycan (PGN)-derived muropeptides through NOD1 that is independent of its GEF activity, but also in the activation of NF-kappaB by Shigella effector proteins (IpgB2 and OspB) which requires its GEF activity and the activation of RhoA. 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 (By similarity). {ECO:0000250|UniProtKB:Q60875, ECO:0000250|UniProtKB:Q865S3, ECO:0000269|PubMed:19043560, ECO:0000269|PubMed:21887730, ECO:0000269|PubMed:28453519, ECO:0000269|PubMed:9857026}.
Molecular Weight:	111.5 kDa
UniProt:	Q92974
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:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.

Handling

Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months