Datasheet for ABIN3137551

RACGAP1 Protein (AA 1-628) (His tag)

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1 Image

Overview

Quantity:	1 mg
Target:	RACGAP1
Protein Characteristics:	AA 1-628
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This RACGAP1 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA, Crystallization (Crys)

Product Details

Sequence:	MDTTMVNLWT LFEQLVRRME IINEGNESIE FIQVVKDFED FRKKYQRTNQ ELEKFKDLLL KAETGRSALD VKLKHARNQV DVEIKRRQRA EAECAKLEQQ IQLIRDILMC DTSGSIQLSE EQKSALAFLN RGQASSGHAG NNRLSTIDES GSILSDISFD KTDESLDWDS SLVKNFKMKK REKRRSNSRQ FIDGPPGPVK KTCSIGSTVD QANESIVAKT TVTVPSDGGP IEAVSTIETL PSWTRSRGKS GPLQPVNSDS ALNSRPLEPR TDTDNLGTPQ NTGGMRLHDF VSKTVIKPES CVPCGKRIKF GKLSLKCRDC RLVSHPECRD RCPLPCIPPL VGTPVKIGEG MLADFVSQAS PMIPAIVVSC VNEIEQRGLT EAGLYRISGC DRTVKELKEK FLKVKTVPLL SKVDDIHVIC SLLKDFLRNL KEPLLTFWLS KAFMEAAEIT DEDNSTAAMY QAVSELPQAN RDTLAFLMIH LQRVSQSPDT KMDIANLAKV FGPTIVAHTV PNPDPVTMFQ DIKRQLKVVE RLLSLPLEYW NQFMMVDQEN IDSQRGNGNS TPRTPDVKVS LLGPVTTPEF QLVKTPLSSS LSQRLYNLSK STPRFGNKSK SATNLGQQGK FFPAPYLK **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 Racgap1 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 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:	RACGAP1
Alternative Name:	Racgap1 (RACGAP1 Products)
Background:	Component of the centralspindlin complex that serves as a microtubule-dependent and Rho-mediated signaling required for the myosin contractile ring formation during the cell cycle cytokinesis. Required for proper attachment of the midbody to the cell membrane during cytokinesis. Plays key roles in controlling cell growth and differentiation of hematopoietic cells through mechanisms other than regulating Rac GTPase activity. Also involved in the regulation of growth-related processes in adipocytes and myoblasts. May be involved in regulating spermatogenesis and in the RACGAP1 pathway in neuronal proliferation. Shows strong GAP (GTPase activation) activity towards CDC42 and RAC1 and less towards RHOA. Essential for the early stages of embryogenesis. May play a role in regulating cortical activity through RHOA during cytokinesis. May participate in the regulation of sulfate transport in male germ cells. {ECO:0000269|PubMed:10235109, ECO:0000269|PubMed:10493933, ECO:0000269|PubMed:10979956, ECO:0000269|PubMed:11287179}.
Molecular Weight:	71.1 kDa Including tag.
UniProt:	Q9WVM1
Pathways:	Regulation of Actin Filament Polymerization, Myometrial Relaxation and Contraction, Regulation of G-Protein Coupled Receptor Protein Signaling, Signaling of Hepatocyte Growth Factor Receptor

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

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Handling

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

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