

Datasheet for ABIN7555220

RACGAP1 Protein (AA 1-632) (His tag)



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Overview

Quantity:	1 mg
Target:	RACGAP1
Protein Characteristics:	AA 1-632
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This RACGAP1 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant RACGAP1 Protein expressed in mammalian cells.
Sequence:	<p>MDTMMLNVRN LFEQLVRRVE ILSEGNEVQF IQLAKDFEDF RKKWQRTDHE LGKYKDLLMK</p> <p>AETERSALDV KCLKHARNQVD VEIKRRQRAE ADCEKLERQI QLIREMLMCD TSGSIQLSEE</p> <p>QKSALAFLNR GQPSSSNAGN KRLSTIDESG SILSDISFDK TDESLDWDSS LVKTFKLKKR</p> <p>EKKRSTSRQF VDGPPGPVKK TRSIGSAVDQ GNESIVAKTT VTPVNDGGPI EAVSTIETVP</p> <p>YWTRSRRTKG TLQPWNSDST LNSRQLEPRT ETDSVGTPQS NGGMRLHDFV SKTVIKPESC</p> <p>VPCGKRIKFG KLSLKCRDCR VVSHPECRDR CPLPCIPTLI GTPVKIGEGM LADFVSQTSP</p> <p>MIPSIVVHCV NEIEQRGLTE TGLYRISGCD RTVKELKEKF LRVKTVPLLS KVDDIHAICS</p> <p>LLKDFLRNLK EPLLTFRNLN AFMEAAEITD EDNSIAAMYQ AVGELPQANR DTLAFLMIHL</p> <p>QRVAQSPHTK MDVANLAKVF GPTIVAHAVP NPDPVTMLQD IKRQPKVVER LLSLPLEYWS</p> <p>QFMMVEQENI DPLHVIENSN AFSTPQTPDI KVSLLGPVTT PEHQLLKTPS SSSLSQVRVS</p> <p>TLTKNTPRFG SKSKSATNLG RQGNFFASPM LK Sequence without tag. The proposed</p> <p>Purification-Tag is based on experiences with the expression system, a different complexity</p>

Product Details

of the protein could make another tag necessary. In case you have a special request, please contact us.

Specificity: If you are looking for a specific domain and are interested in a partial protein or a different isoform, please contact us regarding an individual offer.

Characteristics: **Key Benefits:**

- Made to order protein - from design to production - by highly experienced protein experts.
- Protein expressed in mammalian 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, anti-tag ELISA, Western Blot and analytical SEC (HPLC)

Grade: custom-made

Target Details

Target: RACGAP1

Alternative Name: RACGAP1 ([RACGAP1 Products](#))

Background: Rac GTPase-activating protein 1 (Male germ cell RacGap) (MgcRacGAP) (Protein CYK4 homolog) (CYK4) (HsCYK-4),FUNCTION: 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. Sequentially binds to ECT2 and RAB11FIP3 which regulates cleavage furrow ingression and abscission during cytokinesis (PubMed:18511905). Plays key roles in controlling cell growth and differentiation of hematopoietic cells through mechanisms other than regulating Rac GTPase activity (PubMed:10979956). Has a critical role in erythropoiesis (PubMed:34818416). Also involved in the regulation of growth-related

Target Details

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:10979956, ECO:0000269|PubMed:11085985, ECO:0000269|PubMed:11278976, ECO:0000269|PubMed:11782313, ECO:0000269|PubMed:14729465, ECO:0000269|PubMed:15642749, ECO:0000269|PubMed:16103226, ECO:0000269|PubMed:16129829, ECO:0000269|PubMed:16236794, ECO:0000269|PubMed:18511905, ECO:0000269|PubMed:19468300, ECO:0000269|PubMed:19468302, ECO:0000269|PubMed:23235882, ECO:0000269|PubMed:9497316}.

Molecular Weight:	71.0 kDa
UniProt:	Q9H0H5
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:	We expect the protein to work for functional studies. 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.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months