

Active Recombinant Human ARHGAP1 protein, GST-tagged

Cat. No. ARHGAP1-36H Lot. No. (See product label)

SPECIFICATION

Product Overview	Recombinant Human ARHGAP1 fused with GST tag was expressed in E. coli.
Species	Human
Source	E.coli
Description	p50RhoGAP (sometimes called Cdc42-GAP or Rho GAP) is a GTPase Activating Protein that catalyzes the hydrolysis of GTP for Rac, Rho, and Cdc42 proteins. It appears to be most active for Cdc42 and least active for Rac.
Form	It is supplied as a lyophilized powder. When reconstituted to 1 mg/ml, the protein is in the following buffer: 2 mM Tris pH 7.6, 0.5 mM MgCl ₂ , 0.5% sucrose and 0.1% dextran.
Bio-activity	Biological activity of full length p50RhoGAP were verified by the ability of the proteins to enhance GTP hydrolysis for GST-RhoA, GST-Rac1 and GST-Cdc42 proteins. At a molar ratio of 1:0.3 (G-protein : full length p50RhoGAP) hydrolysis of bound GTP was at least 75% completed after 5 min at room temperature. Hydrolysis of bound GTP in the absence of RhoGAP was 0% (GST-RhoA), 10% (GST-Cdc42) or 45% (GST-Rac1) after 5 min at room temperature.
Molecular Mass	This protein is 78 kDa in size and is comprised of the 50 kDa full length p50RhoGAP protein and a 28 kDa GST tag
Purity	90%

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Applications In vitro GAP assays with various Rho proteins;
Inhibition of Rho proteins in vivo by microinjection.

GENE INFORMATION

Gene Name [ARHGAP1 Rho GTPase activating protein 1 \[Homo sapiens \]](#)

Official Symbol [ARHGAP1](#)

Synonyms ARHGAP1; Rho GTPase activating protein 1; rho GTPase-activating protein 1; Cdc42GAP; CDC42GAP; p50rhoGAP; RhoGAP; p50-RhoGAP; CDC42 GTPase-activating protein; GTPase-activating protein rhoOGAP; rho-type GTPase-activating protein 1; rho-related small GTPase protein activator; RHOGAP; RHOGAP1;

Gene ID [392](#)

mRNA Refseq [NM_004308](#)

Protein Refseq [NP_004299](#)

MIM [602732](#)

UniProt ID [Q07960](#)

Chromosome Location 11p11.2

Pathway Regulation of CDC42 activity, organism-specific biosystem; Regulation of RAC1 activity, organism-specific biosystem; Rho GTPase cycle, organism-specific biosystem; Signal Transduction, organism-specific biosystem; Signaling by Rho GTPases, organism-specific biosystem;

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Function

GTPase activator activity; Rac GTPase activator activity; Rho GTPase activator activity; SH3 domain binding; SH3/SH2 adaptor activity; protein binding;

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