

# Recombinant human RhoG protein

Catalog Number: ATGP1595

## PRODUCT INFORMATION

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### Expression system

E.coli

### Domain

1-188aa

### UniProt No.

P84095

### NCBI Accession No.

NP\_001656

### Alternative Names

Rho-related GTP-binding protein RhoG, ARHG, Ras homolog family member G

## PRODUCT SPECIFICATION

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### Molecular Weight

25.2 kDa (225aa) confirmed by MALDI-TOF

### Concentration

0.25mg/ml (determined by Bradford assay)

### Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) 20% glycerol, 50mM Imidazole, 0.5M NaCl

### Purity

> 85% by SDS-PAGE

### Tag

His-Tag

### Application

SDS-PAGE

### Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

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### Description

RhoG (Ras homology Growth-related) is a member of the Rac subfamily of the Rho family of small G proteins. RhoG is a small monomeric GTP-binding protein (G protein), and is an important component of many intracellular signaling pathways. This protein are required for the formation of membrane ruffles during micropinocytosis. It plays a role in cell migration and is required for the formation of cup-like structures during trans-endothelial migration of leukocytes. Like most small G proteins RhoG is involved in a diverse set of cellular signaling mechanisms. In mammalian cells these include cell motility, gene transcription, endocytosis, neurite outgrowth,

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protection from anoikis and regulation of the neutrophil NADPH oxidase. Recombinant human RhoG protein, fused to His-tag at N-terminus, was expressed in *E. coli* and purified by using conventional chromatography techniques.

## Amino acid Sequence

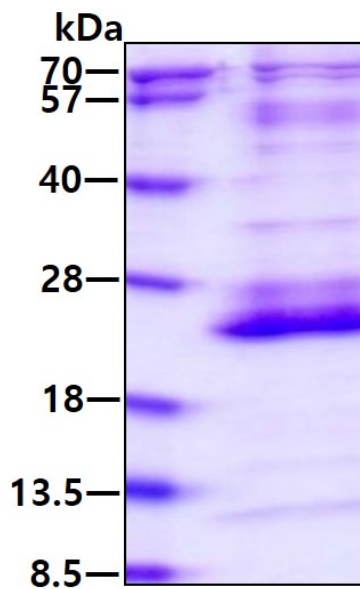
<MRGSHHHHHH GMASMTGGGQQ MGRDLYDDDD KDRWGSH>MQS IKCVVVG DGA VGKTCLLICY TTNAFPKEYI  
PTVFDNYS AQ SAVDGR TVNL NLWDTAGQEE YDRLRTL SYP QTNV FVICFS IASPPSYENV RHKWHPEVCH HCPDVPILLV  
GTKKDLRAQP DTLRRLKEQG QAPITPQQGQ ALAKQIHAVR YLECSALQQD GVKEVFAEAV RAVLNPTPIK RGRSC

## General References

van Buul J.D., et al. (2007) *J. Cell Biol.* 178:1279-1293  
Ellerbroek S.M., et al. (2004) *Mol. Biol. Cell* 15:3309-3319

## DATA

### SDS-PAGE



3 $\mu$ g by SDS-PAGE under reducing condition and visualized by coomassie blue stain.