PRODUCT INFORMATION

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

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

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,



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

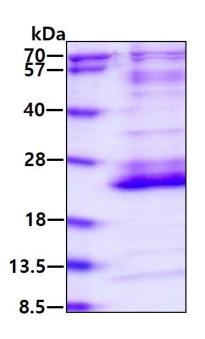
<MRGSHHHHHH GMASMTGGQQ MGRDLYDDDD KDRWGSH>MQS IKCVVVGDGA VGKTCLLICY TTNAFPKEYI
PTVFDNYSAQ SAVDGRTVNL NLWDTAGQEE YDRLRTLSYP QTNVFVICFS IASPPSYENV RHKWHPEVCH HCPDVPILLV
GTKKDLRAQP DTLRRLKEQG QAPITPQQGQ ALAKQIHAVR YLECSALQQD GVKEVFAEAV RAVLNPTPIK RGRSC

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



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.