

Product datasheet

Recombinant Human RhoA protein ab101594

1 Image

Overview

Product name	Recombinant Human RhoA protein
Protein length	Full length protein

Description

Nature	Recombinant
Source	Escherichia coli

Amino Acid Sequence

Accession	P61586
Species	Human
Molecular weight	23 kDa including tags
Amino acids	1 to 193
Tags	His tag N-Terminus

Specifications

Our [Abpromise guarantee](#) covers the use of **ab101594** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	Western blot SDS-PAGE
Purity	> 85 % SDS-PAGE. The purity was determined to be >85% by densitometry
Form	Liquid

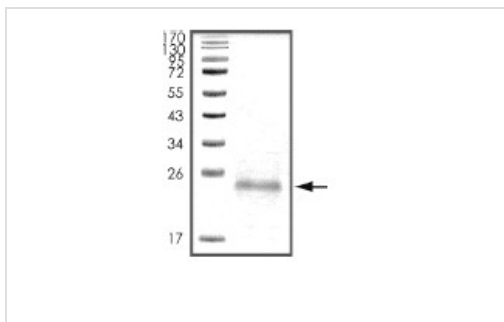
Preparation and Storage

Stability and Storage	Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles. Preservative: 150mM Imidazole Constituents: 25% Glycerol, 50mM MOPS, 300mM Sodium chloride, 0.25mM DTT, 0.1mM PMSF, pH 7.0
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General Info

Function	Regulates a signal transduction pathway linking plasma membrane receptors to the assembly of focal adhesions and actin stress fibers. Serves as a target for the yopT cysteine peptidase from <i>Yersinia pestis</i> , vector of the plague, and <i>Yersinia pseudotuberculosis</i> , which causes gastrointestinal disorders. May be an activator of PLCE1. Activated by ARHGEF2, which promotes the exchange of GDP for GTP.
Sequence similarities	Belongs to the small GTPase superfamily. Rho family.
Domain	The basic-rich region is essential for yopT recognition and cleavage.
Post-translational modifications	<p>Substrate for botulinum ADP-ribosyltransferase.</p> <p>Cleaved by yopT protease when the cell is infected by some <i>Yersinia</i> pathogens. This removes the lipid attachment, and leads to its displacement from plasma membrane and to subsequent cytoskeleton cleavage.</p> <p>AMPylation at Tyr-34 and Thr-37 are mediated by bacterial enzymes in case of infection by <i>H.somnus</i> and <i>V.parahaemolyticus</i>, respectively. AMPylation occurs in the effector region and leads to inactivation of the GTPase activity by preventing the interaction with downstream effectors, thereby inhibiting actin assembly in infected cells. It is unclear whether some human enzyme mediates AMPylation; FICD has such ability in vitro but additional experiments remain to be done to confirm results in vivo.</p> <p>Ubiquitinated by the BCR(BACURD1) and BCR(BACURD2) E3 ubiquitin ligase complexes, leading to its degradation by the proteasome, thereby regulating the actin cytoskeleton and cell migration.</p>
Cellular localization	Cell membrane. Cytoplasm > cytoskeleton.

Images



SDS-PAGE analysis of ab101594

SDS-PAGE - RhoA protein (ab101594)

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