

Product datasheet

Recombinant Human RALA protein ab102555

[1 References](#) [2 Images](#)

Description

Product name	Recombinant Human RALA protein
Purity	> 90 % SDS-PAGE. ab102555 was purified using conventional chromatography techniques.
Expression system	Escherichia coli
Accession	<u>P11233</u>
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Human
Sequence	MGSSHHHHHSSGLVPRGSHMGSHMAANKPKGQNSLA LHKVIMVGSGGVG KSALTLQFM YDEFVEDYEPTKADSYRKKVVL DGEEVQIDIL DTAGQEDYA AIRDNYFRSGEGFLCVFSITEMESFAATADFREQLRVKED ENVPFLLVG NKSDLEDKRQVSVEEAKNRAEQWNVNYVETSAKTRANV DKVFFDLMREIR ARKMEDSKEKNGKKKRKSLAKRIRERC
Predicted molecular weight	26 kDa including tags
Amino acids	1 to 203
Tags	His tag N-Terminus

Specifications

Our **Abpromise guarantee** covers the use of **ab102555** 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 Mass Spectrometry SDS-PAGE
Mass spectrometry	MALDI-TOF
Form	Liquid

Preparation and Storage

Stability and Storage

Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.

pH: 8.00

Constituents: 0.00174% PMSF, 0.0308% DTT, 0.316% Tris HCl, 10% Glycerol (glycerin, glycerine), 0.58% Sodium chloride

General Info

Function

Multifunctional GTPase involved in a variety of cellular processes including gene expression, cell migration, cell proliferation, oncogenic transformation and membrane trafficking. Accomplishes its multiple functions by interacting with distinct downstream effectors. Acts as a GTP sensor for GTP-dependent exocytosis of dense core vesicles. Plays a role in the early stages of cytokinesis and is required to tether the exocyst to the cytokinetic furrow. The RALA-exocyst complex regulates integrin-dependent membrane raft exocytosis and growth signaling. Key regulator of LPAR1 signaling and competes with ADRBK1 for binding to LPAR1 thus affecting the signaling properties of the receptor. Required for anchorage-independent proliferation of transformed cells.

Sequence similarities

Belongs to the small GTPase superfamily. Ras family.

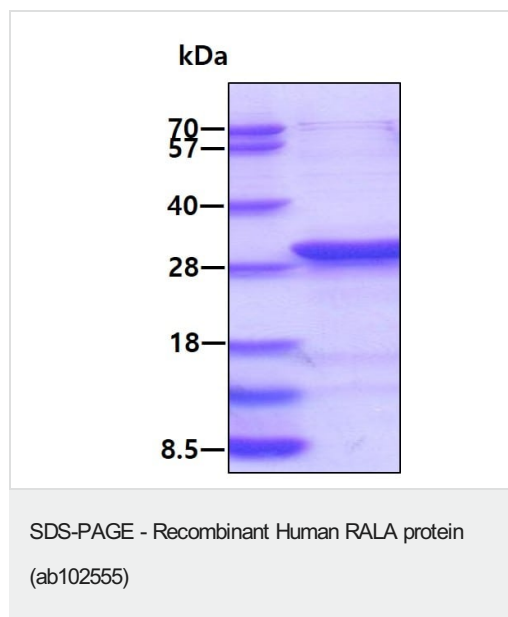
Post-translational modifications

Prenylation is essential for membrane localization. The geranylgeranylated form and the farnesylated mutant does not undergo alternative prenylation in response to geranylgeranyltransferase I inhibitors (GGTIs) and farnesyltransferase I inhibitors (FTIs).

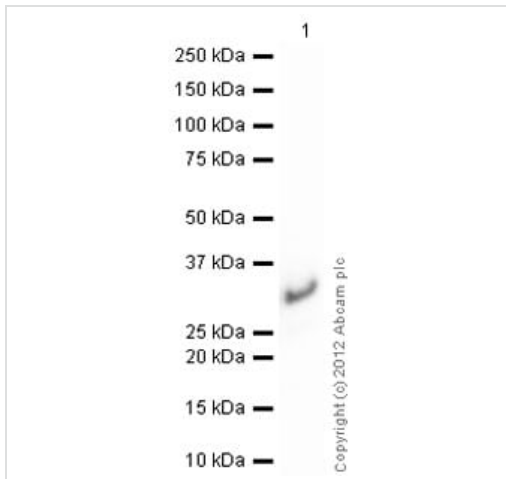
Cellular localization

Cell surface. Cell membrane. Cleavage furrow. Midbody. Prior to LPA treatment found predominantly at the cell surface and in the presence of LPA co-localizes with LPAR1 and LPAR2 in the endocytic vesicles. During early cytokinesis localizes at the cleavage furrow membrane. Colocalizes with EXOC2 at the early midbody ring and persists there till maturation of the midbody.

Images



15% SDS-PAGE analysis of 3µg of ab102555.



Western blot - Recombinant Human RALA protein (ab102555)

Anti-RALA antibody (**ab96759**) at 1/3000 dilution + Recombinant Human RALA protein (ab102555) at 0.01 µg

Secondary

Goat Anti-Rabbit IgG H&L (HRP) preadsorbed (**ab97080**) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Exposure time: 4 minutes

ab96759 recognizes the full length tagged recombinant protein ab102555 which has an expected molecular weight of 30 kDa.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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