

Product datasheet

Anti-RACGAP1 antibody ab98169

1 Image

Overview

Product name	Anti-RACGAP1 antibody
Description	Rabbit polyclonal to RACGAP1
Host species	Rabbit
Tested applications	Suitable for: WB
Species reactivity	Reacts with: Human Predicted to work with: Mouse, Rat, Rabbit, Guinea pig, Cow, Cat, Dog
Immunogen	Synthetic peptide corresponding to a region within N terminal amino acids 179-228, KREKRRSTSR QFVDGPPGPV KKTRSIGSAV DQGNESIVAK TTVTVPNDGG, of Human RACGAP1 (NP_037409). Run BLAST with ExPASy Run BLAST with NCBI
Positive control	ACHN cell lysate

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid repeated freeze / thaw cycles.
Storage buffer	Preservative: None Constituents: 2% Sucrose, PBS
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab98169** in the following tested applications.

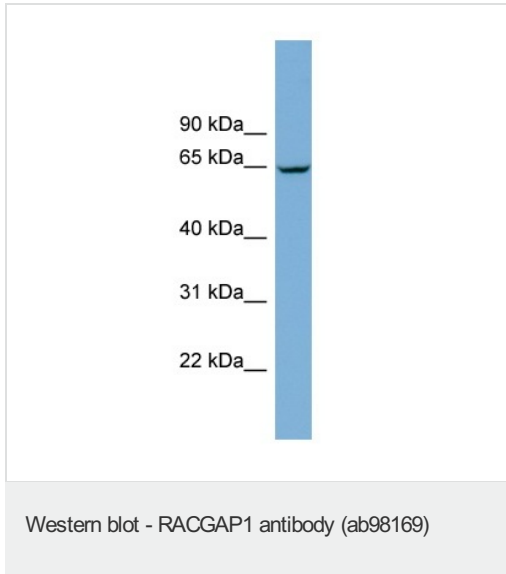
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use a concentration of 1 µg/ml. Predicted molecular weight: 71 kDa. Good results were obtained when blocked with 5% non-fat dry milk in 0.05% PBS-T.

Target

Function	Component of the centralspindlin complex that serves as a microtubule-dependent and Rho-mediated signaling required for the myosin contractile ring formation during the cell cycle cytokinesis. Plays key roles in controlling cell growth and differentiation of hematopoietic cells through mechanisms other than regulating Rac GTPase activity. Also involved in the regulation of growth-related processes in adipocytes and myoblasts. May be involved in regulating spermatogenesis and in the RACGAP1 pathway in neuronal proliferation. Shows strong GAP (GTPase activation) activity towards CDC42 and RAC1 and less towards RHOA. Essential for the early stages of embryogenesis. May play a role in regulating cortical activity through RHOA during cytokinesis. May participate in the regulation of sulfate transport in male germ cells.
Tissue specificity	Highly expressed in testis, thymus and placenta. Expressed at lower levels in spleen and peripheral blood lymphocytes. In testis, expression is restricted to germ cells with the highest levels of expression found in spermatocytes. Expression is regulated in a cell cycle-dependent manner and peaks during G2/M phase.
Sequence similarities	Contains 1 phorbol-ester/DAG-type zinc finger. Contains 1 Rho-GAP domain.
Domain	The coiled coil region is indispensable for localization to the midbody during cytokinesis.
Post-translational modifications	Phosphorylated at multiple sites in the midbody during cytokinesis. Phosphorylation by AURKB on Ser-387 at the midbody is, at least in part, responsible for exerting its latent GAP activity towards RhoA. Phosphorylation on multiple serine residues by PLK1 enhances its association with ECT2 and is critical for cleavage furrow formation.
Cellular localization	Nucleus. Cytoplasm. Cytoplasm > cytoskeleton > spindle. Cytoplasmic vesicle > secretory vesicle > acrosome. Cleavage furrow. Midbody. Colocalizes with RND2 in Golgi-derived proacrosomal vesicles and the acrosome (By similarity). During interphase, localized to the nucleus and cytoplasm along with microtubules, in anaphase, is redistributed to the central spindle and, in telophase and cytokinesis, to the midbody. Colocalizes with RHOA at the myosin contractile ring during cytokinesis. Colocalizes with ECT2 to the mitotic spindles during anaphase/metaphase, the cleavage furrow during telophase and at the midbody at the end of cytokinesis. Colocalizes with Cdc42 to spindle microtubules from prometaphase to telophase.

Images



Anti-RACGAP1 antibody (ab98169) at 1 µg/ml (in 5% skim milk / PBS buffer) + ACHN cell lysate at 10 µg

Secondary

HRP conjugated anti-Rabbit IgG at 1/50000 dilution

Predicted band size: 71 kDa

12% gel

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