



Product datasheet

Anti-RhoA + C antibody [1B34A10] ab175359

3 Images

Overview

Product name	Anti-RhoA + C antibody [1B34A10]
Description	Mouse monoclonal [1B34A10] to RhoA + C
Host species	Mouse
Tested applications	Suitable for: IP, ICC/IF, WB
Species reactivity	Reacts with: Mouse, Human
Immunogen	<p>Recombinant full length protein corresponding to Human RhoA + C aa 1-193. Sequence:</p> <p>MAAIRKKLVIVGDGACGKTCLLIVFSKDQFPEVYVPTVFEN YVADIEVDG KQVELALWDTAGQEDYDRLRPLSYPDTDVILMCFSIDSPD SLENIPEKWT PEVKHFPCNPVPIILVGNKKDLRND EHRRELAKMKQEPVK PEEGRDMANR IGAFGYMECSAKTKDGVREVFEMATRAALQARRGKKKSG CLVL</p> <p>Database link: P61586</p> <p style="text-align: right;">  Run BLAST with  Run BLAST with </p>
Positive control	HeLa, A431, HEK293T, NIH 3T3, U2 OS and K562 whole cell lysates; RhoA and RhoC recombinant proteins; HeLa cells.
General notes	<p>Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.</p> <p>Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.</p> <p>We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.</p> <p>In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.</p> <p>We are also updating the applications & species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.</p>

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, as well as customer reviews and Q&As.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.05% Sodium azide Constituents: 0.1% BSA, 30% Glycerol (glycerin, glycerine), 69% PBS
Purity	Protein A purified
Clonality	Monoclonal
Clone number	1B34A10
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab175359** 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
IP		Use at an assay dependent concentration. Use 2µg.
ICC/IF		1/100 - 1/200.
WB		1/500 - 1/1500. Predicted molecular weight: 22 kDa.

Target

Relevance

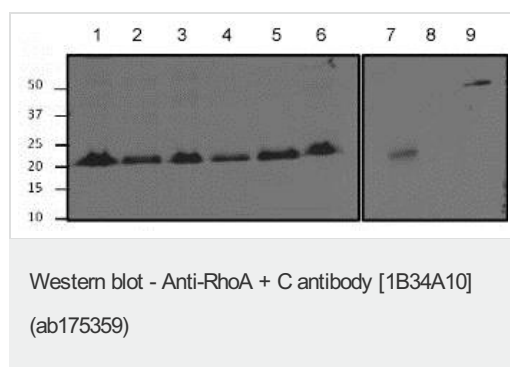
RhoA regulates a signal transduction pathway linking plasma membrane receptors to the assembly of focal adhesions and actin stress fibers. Involved in a microtubule-dependent signal that is required for the myosin contractile ring formation during cell cycle cytokinesis. Plays an essential role in cleavage furrow formation. Required for the apical junction formation of keratinocyte cell-cell adhesion. Serves as a target for the yopT cysteine peptidase from *Yersinia pestis*, vector of the plague, and *Yersinia pseudotuberculosis*, which causes gastrointestinal disorders. Stimulates PKN2 kinase activity. May be an activator of PLCE1. Activated by ARHGEF2, which promotes the exchange of GDP for GTP. Essential for the SPATA13-mediated regulation of cell migration and adhesion assembly and disassembly. The MEMO1-RHOA-DIAPH1 signaling pathway plays an important role in ERBB2-dependent stabilization of microtubules at the cell cortex. It controls the localization of APC and CLASP2 to the cell

membrane, via the regulation of GSK3B activity. In turn, membrane-bound APC allows the localization of the MACF1 to the cell membrane, which is required for microtubule capture and stabilization. RhoC regulates a signal transduction pathway linking plasma membrane receptors to the assembly of focal adhesions and actin stress fibers. Serves as a microtubule-dependent signal that is required for the myosin contractile ring formation during cell cycle cytokinesis. Regulates apical junction formation in bronchial epithelial cells.

Cellular localization

RhoA: Cell membrane; Lipid-anchor; Cytoplasmic side. Cytoplasm; cytoskeleton. Cleavage furrow. Cytoplasm; cell cortex. Midbody. RhoC:Cell membrane; Lipid-anchor; Cytoplasmic side Potential. Cleavage furrow.

Images



All lanes : Anti-RhoA + C antibody [1B34A10] (ab175359) at 1/1000 dilution

Lane 1 : HeLa whole cell lysate at 25 µg

Lane 2 : A431 whole cell lysate at 25 µg

Lane 3 : HEK293T whole cell lysate at 25 µg

Lane 4 : U2 OS whole cell lysate at 25 µg

Lane 5 : NIH 3T3 whole cell lysate at 25 µg

Lane 6 : K562 whole cell lysate at 25 µg

Lane 7 : RhoA purified protein at 0.5 µg

Lane 8 : RhoB purified protein at 0.5 µg

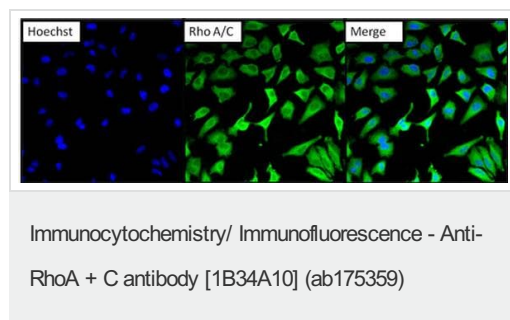
Lane 9 : RhoC purified protein with proprietary tag at 0.5 µg

Secondary

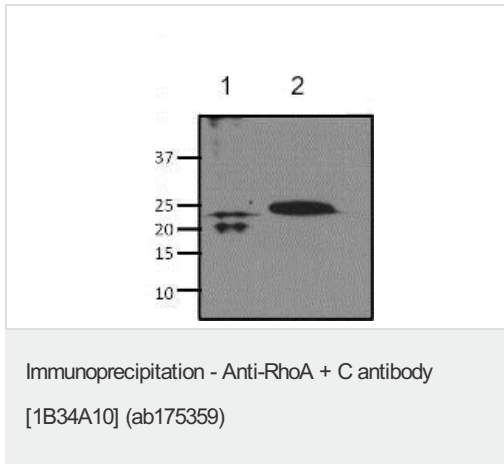
All lanes : goat anti-mouse IgG-HRP at 1/15000 dilution

Developed using the ECL technique.

Predicted band size: 22 kDa



Immunofluorescent analysis of HeLa cells (formalin-fixed, 0.1% Triton X-100 permeabilized) labeling RhoA + C with ab175359 at 1/100 dilution followed with DyLight 488 goat anti-mouse IgG secondary antibody at 1/400 dilution. Nuclei (blue) were stained with Hoechst 33342 dye.



Immunoprecipitation analysis of RhoA + C was performed on HeLa cells. Antigen-antibody complexes were formed by incubating 500µg of whole cell lysate with 2µg ab175359 (lane 2).

HeLa cell lysate was run as a control (lane 1).

For WB detection, ab175359 was used at 1/1000 dilution.

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

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