

Product datasheet

Anti-RAB10 antibody [4E2] ab104859

[7 References](#) [3 Images](#)

Overview

Product name	Anti-RAB10 antibody [4E2]
Description	Mouse monoclonal [4E2] to RAB10
Host species	Mouse
Tested applications	Suitable for: ICC/IF, WB, Flow Cyt
Species reactivity	Reacts with: Mouse, Human
Immunogen	Purified recombinant fragment of Human RAB10 expressed in E. coli.
Positive control	Hela and NIH/3T3 cell lysates; LOVO cells
General notes	This product was changed from ascites to supernatant. Lot no's high than GR120151-16 are from Tissue Culture Supernatant

Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.

Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.

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.

In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.

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.

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
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Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Store at -20°C long term.
Storage buffer	Preservative: 0.05% Sodium azide Constituent: PBS
Purity	Protein G purified
Purification notes	Purified from tissue culture supernatant.
Clonality	Monoclonal
Clone number	4E2
Isotype	IgG1

Applications

Our [Abpromise guarantee](#) covers the use of **ab104859** 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
ICC/IF		1/200 - 1/1000.
WB		1/500 - 1/2000. Predicted molecular weight: 23 kDa.
Flow Cyt		1/100. ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

Target

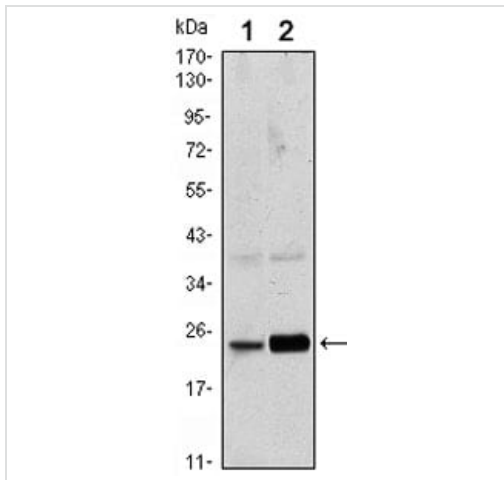
Function

The small GTPases Rab are key regulators of intracellular membrane trafficking, from the formation of transport vesicles to their fusion with membranes. Rabs cycle between an inactive GDP-bound form and an active GTP-bound form that is able to recruit to membranes different set of downstream effectors directly responsible for vesicle formation, movement, tethering and fusion (By similarity). That Rab is mainly involved in the biosynthetic transport of proteins from the Golgi to the plasma membrane. Regulates, for instance, SLC2A4/GLUT4 glucose transporter-enriched vesicles delivery to the plasma membrane. In parallel, it regulates the transport of TLR4, a toll-like receptor to the plasma membrane and therefore may be important for innate immune response. Plays also a specific role in asymmetric protein transport to the plasma membrane within the polarized neuron and epithelial cells. In neurons, it is involved in axonogenesis through regulation of vesicular membrane trafficking toward the axonal plasma membrane while in epithelial cells, it regulates transport from the Golgi to the basolateral membrane. Moreover, may play a role in the basolateral recycling pathway and in phagosome maturation. According to PubMed:23263280, may play a role in endoplasmic reticulum dynamics and morphology controlling tubulation along microtubules and tubules fusion.

Sequence similarities Belongs to the small GTPase superfamily. Rab family.

Cellular localization Cytoplasmic vesicle membrane. Golgi apparatus membrane. Golgi apparatus, trans-Golgi network membrane. Endosome membrane. Recycling endosome membrane. Cytoplasmic vesicle, phagosome membrane. Cell projection, cilium. Endoplasmic reticulum membrane. Associates with SLC2A4/GLUT4 storage vesicles (PubMed:22908308). Localizes to the base of the cilium (PubMed:20576682). Transiently associates with phagosomes (By similarity).

Images



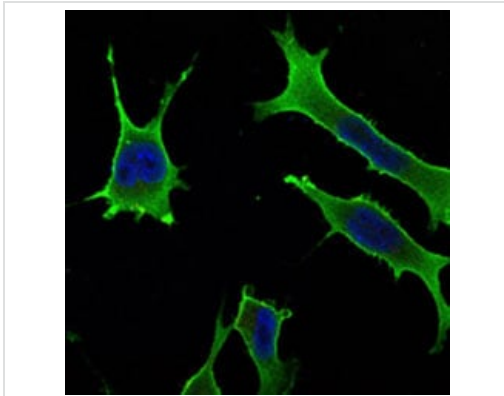
Western blot - Anti-RAB10 antibody [4E2]
(ab104859)

All lanes : Anti-RAB10 antibody [4E2] (ab104859) at 1/500 dilution

Lane 1 : HeLa cell lysate

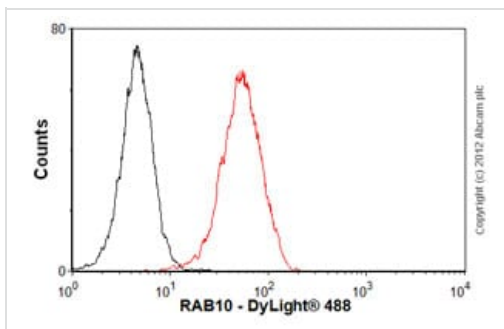
Lane 2 : NIH/3T3 cell lysate

Predicted band size: 23 kDa



Immunocytochemistry/ Immunofluorescence - Anti-RAB10 antibody [4E2] (ab104859)

Immunofluorescence analysis of LOVO cells using ab104859 (green). Blue: DRAQ5 fluorescent DNA dye.



Flow Cytometry - Anti-RAB10 antibody [4E2]
(ab104859)

Overlay histogram showing HeLa cells stained with ab104859 (red line). The cells were fixed with 80% methanol (5 min) and incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab104859, 1/100 dilution) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (ab91653, 2µg/1x10⁶ cells) used under the same conditions. Acquisition of >5,000 events was performed.

Please note that Abcam do not have any data for use of this

antibody on non-fixed cells. We welcome any customer feedback.

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

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