

## Product datasheet

# Anti-RAB10 antibody [4E2] ab104859

[3 References](#)   [3 Images](#)

### Overview

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

### Properties

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

Application	Abreviews	Notes
WB		1/500 - 1/2000. Predicted molecular weight: 23 kDa.
ELISA		1/10000.
Flow Cyt		1/100. <a href="#">ab170190</a> - 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.

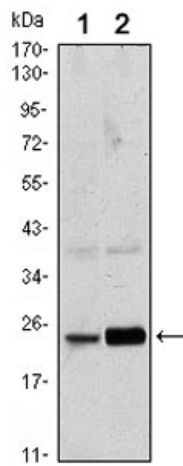
### Sequence similarities

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). Localizes to the endoplasmic reticulum at domains of new tubule growth (PubMed:23263280).

## Images



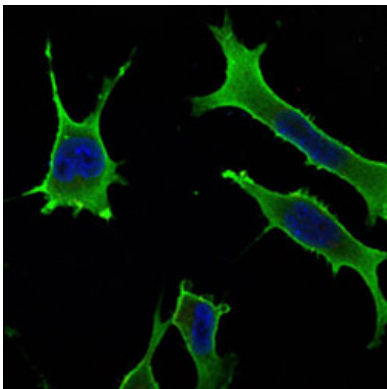
Western blot - Anti-RAB10 antibody [4E2]  
(ab104859)

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

**Lane 1 :** Hela cell lysate

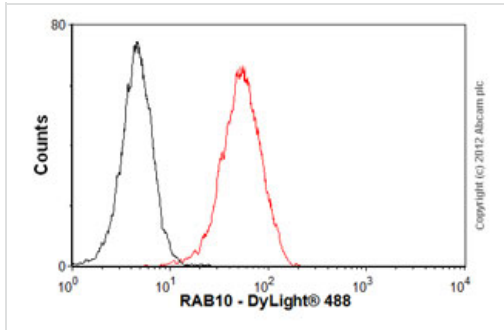
**Lane 2 :** NIH/3T3 cell lysate

**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/1x10<sup>6</sup> 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.

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