

Product datasheet

Alexa Fluor® 594 Anti-RAB10 antibody [MJF-R23] ab302835

Recombinant RabMAb

3 Images

Overview		
Product name	Alexa Fluor® 594 Anti-RAB10 antibody [MJF-R23]	
Description	Alexa Fluor® 594 Rabbit monoclonal [MJF-R23] to RAB10	
Host species	Rabbit	
Conjugation	Alexa Fluor® 594. Ex: 590nm, Em: 617nm	
Tested applications	Suitable for: ICC/IF, Flow Cyt (Intra)	
Species reactivity	Reacts with: Human	
Immunogen	Recombinant full length protein. This information is proprietary to Abcam and/or its suppliers.	
Positive control	ICC/IF: A549 (human lung carcinoma epithelial cell). Flow cyt. intr.: A549 (human lung carcinoma epithelial cell).	
General notes	This product is a recombinant monoclonal antibody, which offers several advantages including:	
	 High batch-to-batch consistency and reproducibility Improved sensitivity and specificity Long-term security of supply Animal-free production For more information <u>see here</u>. Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <u>RabMAb[®] patents</u>. 	
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outlicensing@thermofisher.com.

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. Store In the Dark.
Storage buffer	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: 68% PBS, 30% Glycerol (glycerin, glycerine), 1% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	MJF-R23
lsotype	lgG

Applications

The Abpromise guarantee Our <u>Abpromise guarantee</u> covers the use of ab302835 in the following tested applications.

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

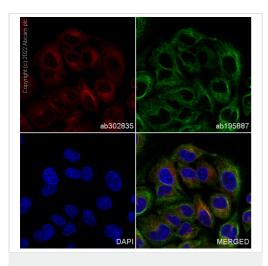
Application	Abreviews	Notes
ICC/IF		1/50.
Flow Cyt (Intra)		1/500.

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. 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).

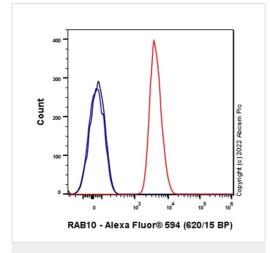
Images



Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized A549 (human lung carcinoma epithelial cell) cells labeling RAB10 with ab302835 at 1/50 dilution (10 μ g/ml) (Red). Confocal image showing cytoplasmic staining in A549 cells.

<u>ab195887</u> Anti-alpha Tubulin mouse monoclonal antibody -Microtubule Marker (Alexa Fluor[®] 488) was used to counterstain tubulin at 1/200 dilution (2.5 µg/ml) (Green). The Nuclear counterstain was DAPI (Blue).

Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 594 Anti-RAB10 antibody [MJF-R23] (ab302835)



Flow Cytometry (Intracellular) - Alexa Fluor® 594 Anti-RAB10 antibody [MJF-R23] (ab302835)

Intracellular flow cytometric analysis of 4% paraformaldehyde fixed, 90% methanol permeabilized A549 (human lung carcinoma epithelial cell) cells labeling RAB10 with ab302835 at 1/500 dilution (0.1 µg) (Red), compared with a Rabbit IgG monoclonal [EPR25A] -Isotype Control (Alexa Fluor[®] 594) (ab208568) (Black) and an unlabeled control (cells without incubation with primary antibody and secondary antibody) (Blue).



(ab302835)

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