

Anti-Rab11A Antibody
Catalog # ABO11591**Specification**

Anti-Rab11A Antibody - Product Information

Application	WB
Primary Accession	P62491
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Ras-related protein Rab-11A(RAB11A) detection. Tested with WB in Human;Mouse;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-Rab11A Antibody - Additional Information

Gene ID 8766

Other Names

Ras-related protein Rab-11A, Rab-11, YL8, RAB11A, RAB11

Calculated MW

24394 MW KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

Subcellular Localization

Cell membrane; Peripheral membrane protein. Recycling endosome membrane; Peripheral membrane protein. Cleavage furrow. Cytoplasmic vesicle, phagosome. Cytoplasmic vesicle, phagosome membrane ; Lipid-anchor ; Cytoplasmic side . Translocates with RAB11FIP2 from the vesicles of the endocytic recycling compartment (ERC) to the plasma membrane. Localizes to the cleavage furrow. Colocalizes with PARD3, PRKCI, EXOC5, OCLN, PODXL and RAB8A in apical membrane initiation sites (AMIS) during the generation of apical surface and lumenogenesis. Recruited to phagosomes containing S.aureus or M.tuberculosis.

Protein Name

Ras-related protein Rab-11A

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human Rab11A(194-211aa NVVPIHVPPTTENKPKVQ), identical to the related mouse and rat sequences.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Anti-Rab11A Antibody - Protein Information

Name RAB11A ([HGNC:9760](#))

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 (PubMed: [15601896](http://www.uniprot.org/citations/15601896), PubMed: [15689490](http://www.uniprot.org/citations/15689490), PubMed: [17462998](http://www.uniprot.org/citations/17462998), PubMed: [19542231](http://www.uniprot.org/citations/19542231), PubMed: [20890297](http://www.uniprot.org/citations/20890297), PubMed: [21282656](http://www.uniprot.org/citations/21282656), PubMed: [20026645](http://www.uniprot.org/citations/20026645)). The small Rab GTPase RAB11A regulates endocytic recycling (PubMed: [20026645](http://www.uniprot.org/citations/20026645)). Forms a functional Rab11/FIP3/dynein complex that regulates the movement of peripheral sorting endosomes (SE) along microtubule tracks toward the microtubule organizing center/centrosome, generating the endosomal recycling compartment (ERC) (PubMed: [20026645](http://www.uniprot.org/citations/20026645)). Acts as a major regulator of membrane delivery during cytokinesis (PubMed: [15601896](http://www.uniprot.org/citations/15601896)). Together with MYO5B and RAB8A participates in epithelial cell polarization. Together with RAB3IP, RAB8A, the exocyst complex, PARD3, PRKCI, ANXA2, CDC42 and DNMBP promotes transcytosis of PODXL to the apical membrane initiation sites (AMIS), apical surface formation and lumenogenesis. Together with MYO5B participates in CFTR trafficking to the plasma membrane and TF (Transferrin) recycling in nonpolarized cells. Required in a complex with MYO5B and RAB11FIP2 for the transport of NPC1L1 to the plasma membrane. Participates in the sorting and basolateral transport of CDH1 from the Golgi apparatus to the plasma membrane. Regulates the recycling of FCGRT (receptor of Fc region of monomeric Ig G) to basolateral membranes. May also play a role in melanosome transport and release from melanocytes (PubMed: [15689490](http://www.uniprot.org/citations/15689490), PubMed: [17462998](http://www.uniprot.org/citations/17462998), PubMed: [19542231](http://www.uniprot.org/citations/19542231), PubMed: [20890297](http://www.uniprot.org/citations/20890297), PubMed: [21282656](http://www.uniprot.org/citations/21282656)). Promotes Rabin8/RAB3IP preciliary vesicular trafficking to mother centriole by forming a ciliary targeting complex containing Rab11, ASAP1, Rabin8/RAB3IP, RAB11FIP3 and ARF4, thereby regulating ciliogenesis initiation (PubMed: [25673879](http://www.uniprot.org/citations/25673879), PubMed: [31204173](http://www.uniprot.org/citations/31204173)). On the contrary, upon LPAR1 receptor signaling pathway activation, interaction with phosphorylated WDR44 prevents Rab11-RAB3IP-RAB11FIP3 complex

formation and cilia growth (PubMed:31204173). Participates in the export of a subset of neosynthesized proteins through a Rab8-Rab10-Rab11- endosomal dependent export route via interaction with WDR44 (PubMed:32344433).

Cellular Location

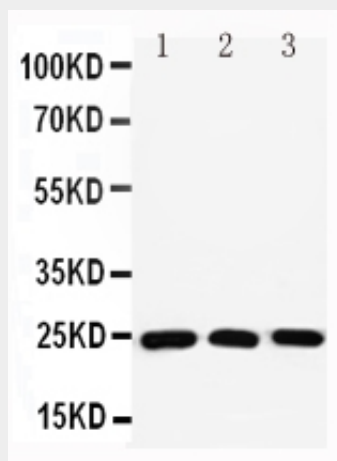
Cell membrane; Lipid-anchor. Endosome membrane. Recycling endosome membrane; Lipid-anchor. Cleavage furrow. Cytoplasmic vesicle, phagosome. Cytoplasmic vesicle membrane. Golgi apparatus. Golgi apparatus, trans-Golgi network. Note=Localized to WDR44-positive endosomes and tubules (PubMed:32344433). Translocates with RAB11FIP2 from the vesicles of the endocytic recycling compartment (ERC) to the plasma membrane (PubMed:11994279). During interphase, localized in vesicles continuously moving from peripheral sorting endosomes towards the pericentrosomal ERC (PubMed:20026645). Localizes to the cleavage furrow (PubMed:15601896). Colocalizes with PARD3, PRKCI, EXOC5, OCLN, PODXL and RAB8A in apical membrane initiation sites (AMIS) during the generation of apical surface and lumenogenesis (PubMed:20890297) Recruited to phagosomes containing S.aureus or M.tuberculosis (PubMed:21255211). Localized to rhodopsin transport carriers when interacting with RAB11AFIP3 and ASAP1 in photoreceptors (PubMed:25673879).

Anti-Rab11A Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-Rab11A Antibody - Images



Anti-Rab11A antibody, ABO11591, All Western blottingAll lanes: Anti-RAB11A(ABO11591) at 0.5ug/mlLane 1: HELA Whole Cell Lysate at 40ugLane 2: NIH Whole Cell Lysate at 40ugLane 3: A431 Whole Cell Lysate at 40ugPredicted bind size: 24KDObserved bind size: 24KD

Anti-Rab11A Antibody - Background

Ras-related protein Rab-11A is a protein that in humans is encoded by the RAB11A gene. The protein encoded by this gene belongs to the small GTPase superfamily, Rab family which plays essential roles in vesicle and granule targeting. It is mapped to 15q22.31. RAB11A is associated with both constitutive and regulated secretory pathways, and may be involved in protein transport. RAB11A also can control intracellular trafficking of the innate immune receptor TLR4, and thereby also receptor signaling. It has been shown to interact with RAB11FIP2, RAB11FIP4, RAB11FIP1 and so on.