

**Anti-Rab11A Picoband Antibody**  
**Catalog # ABO12475****Specification**

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**Anti-Rab11A Picoband Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">P62491</a>
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.

**Reconstitution**

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

**Anti-Rab11A Picoband 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<br>

**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 Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Na<sub>3</sub>.

**Immunogen**

A synthetic peptide corresponding to a sequence at the C-terminus of human Rab11A (171-211aa EIYRIVSQKQMSDRRENDMSPSNNVPIHVPPTTENKPKVQ), 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 Picoband 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: [20026645](http://www.uniprot.org/citations/20026645), PubMed: [20890297](http://www.uniprot.org/citations/20890297), PubMed: [21282656](http://www.uniprot.org/citations/21282656), PubMed: [26032412](http://www.uniprot.org/citations/26032412)). The small Rab GTPase RAB11A regulates endocytic recycling (PubMed: [20026645](http://www.uniprot.org/citations/20026645)). Forms a functional Rab11/RAB11FIP3/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 (PubMed: [21282656](http://www.uniprot.org/citations/21282656)). Together with Rabin8/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 (PubMed: [20890297](http://www.uniprot.org/citations/20890297)). Together with MYO5B participates in CFTR trafficking to the plasma membrane and TF (Transferrin) recycling in nonpolarized cells (PubMed: [17462998](http://www.uniprot.org/citations/17462998)). Required in a complex with MYO5B and RAB11FIP2 for the transport of NPC1L1 to the plasma membrane (PubMed: [19542231](http://www.uniprot.org/citations/19542231)). Participates in the sorting and basolateral transport of CDH1 from the Golgi apparatus to the plasma membrane (PubMed: [15689490](http://www.uniprot.org/citations/15689490)). Regulates the recycling of FCGRT (receptor of Fc region of monomeric IgG) to basolateral membranes (By similarity). May also play a role in melanosome transport and release from melanocytes (By similarity). 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: [26032412](#)).

href="http://www.uniprot.org/citations/25673879" target="\_blank">25673879</a>, PubMed:<a href="http://www.uniprot.org/citations/31204173" target="\_blank">31204173</a>). On the contrary, upon LPAR1 receptor signaling pathway activation, interaction with phosphorylated WDR44 prevents Rab11-RAB3IP-RAB11FIP3 complex formation and cilia growth (PubMed:<a href="http://www.uniprot.org/citations/31204173" target="\_blank">31204173</a>). Participates in the export of a subset of neosynthesized proteins through a Rab8-Rab10-Rab11-endosomal dependent export route via interaction with WDR44 (PubMed:<a href="http://www.uniprot.org/citations/32344433" target="\_blank">32344433</a>).

#### **Cellular Location**

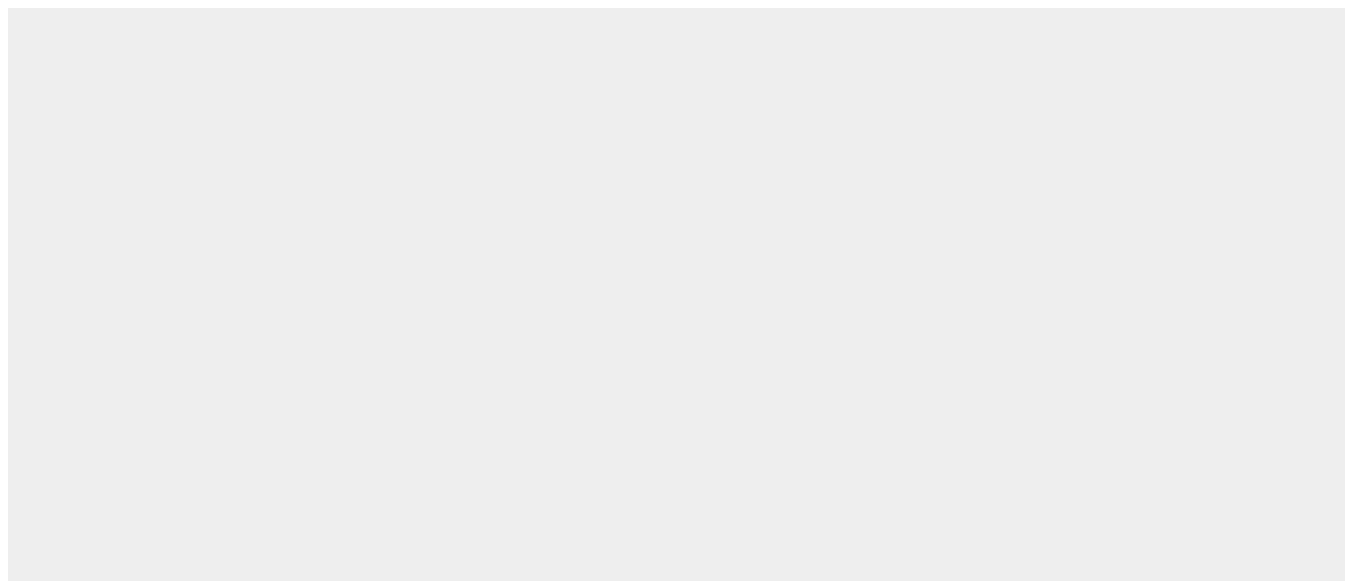
Cell membrane; Lipid-anchor. Endosome membrane. Recycling endosome membrane; Lipid-anchor. Cleavage furrow. Cytoplasmic vesicle, phagosome. Cytoplasmic vesicle membrane. Golgi apparatus. Golgi apparatus, trans-Golgi network. Cytoplasmic vesicle. Note=Localized to WDR44-positive endosomes and tubules (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). Colocalizes with RAB11AFIP1 on punctate vesicles (PubMed:26032412).

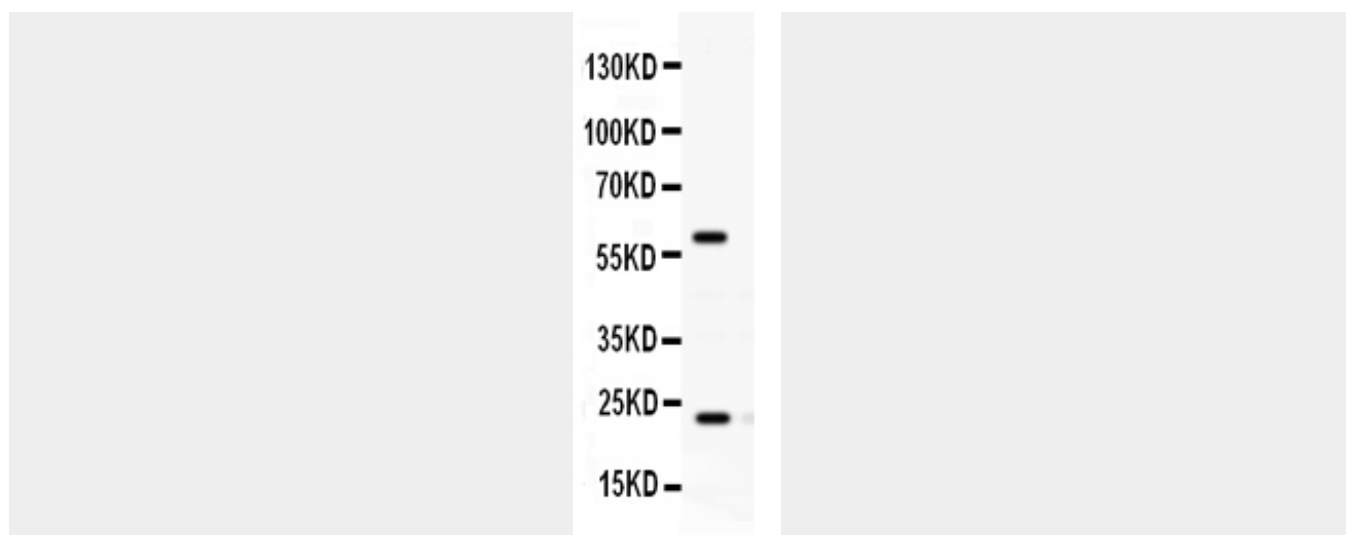
#### **Anti-Rab11A Picoband Antibody - Protocols**

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 Picoband Antibody - Images**





Anti- Rab11A Picoband antibody, ABO12475, Western blotting All lanes: Anti Rab11A (ABO12475) at 0.5ug/ml WB: A549 Whole Cell Lysate at 40ug Predicted bind size: 24KD, 60KD Observed bind size: 24KD, 60KD

#### **Anti-Rab11A Picoband 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. Additionally, RAB11A can control intracellular trafficking of the innate immune receptor TLR4, and thereby also receptor signaling. It has been shown to interact with RAB11FIP2, RAB11FIP4, and RAB11FIP1 and so on.