

Goat Anti-RAB11A / YL8 Antibody
Peptide-affinity purified goat antibody
Catalog # AF1891a

Specification

Goat Anti-RAB11A / YL8 Antibody - Product Information

Application	WB
Primary Accession	P62491
Other Accession	NP_004654 , 8766 , 53869 (mouse) , 81830 (rat)
Reactivity	Mouse
Predicted	Human, Rat
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	24394

Goat Anti-RAB11A / YL8 Antibody - Additional Information

Gene ID 8766

Other Names

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

Format

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat Anti-RAB11A / YL8 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-RAB11A / YL8 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, PubMed: 19542231, PubMed: 20026645, PubMed: 20890297, PubMed: 21282656). The small Rab GTPase RAB11A regulates endocytic recycling (PubMed: 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). Acts as a major regulator of membrane delivery during cytokinesis (PubMed: 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, PubMed: 17462998, PubMed: 19542231, PubMed: 20890297, PubMed: 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, PubMed: 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

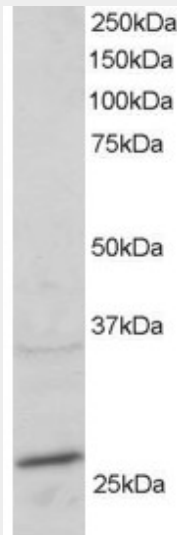
Cell membrane; Lipid-anchor. Endosome membrane. Recycling endosome membrane; Lipid-anchor. Cleavage furrow. Cytoplasmic vesicle, phagosome. Cytoplasmic vesicle membrane. Golgi apparatus. Golgi apparatus, trans-Golgi network. Note=Localized to WDR44-positive endosomes and tubules (PubMed:32344433). Translocates 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).

Goat Anti-RAB11A / YL8 Antibody - Protocols

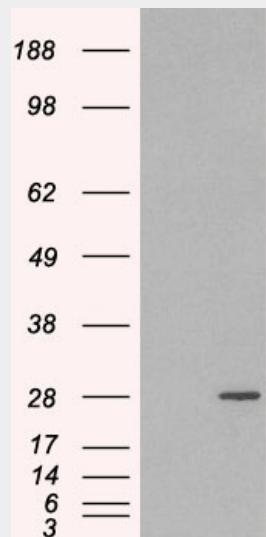
Provided below are standard protocols that you may find useful for product applications.

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

Goat Anti-RAB11A / YL8 Antibody - Images



AF1891a staining (2 μ g/ml) of mouse heart lysate (RIPA buffer, 30 μ g total protein per lane). Primary incubated for 1 hour. Detected by western blot using chemiluminescence.



HEK293 overexpressing RAB11A(RC200352) and probed with AF1891a (mock transfection in first lane), tested by Origene.

Goat Anti-RAB11A / YL8 Antibody - Background

The protein encoded by this gene belongs to the small GTPase superfamily, Rab family. It is associated with both constitutive and regulated secretory pathways, and may be involved in protein transport.

Goat Anti-RAB11A / YL8 Antibody - References

Interaction of the human prostacyclin receptor with Rab11: characterization of a novel Rab11 binding domain within alpha-helix 8 that is regulated by palmitoylation. Reid HM, et al. J Biol Chem, 2010 Jun 11. PMID 20395296.

The Rab11 pathway is required for influenza A virus budding and filament formation. Bruce EA, et al. J Virol, 2010 Jun. PMID 20357086.

Involvement of Rab9 and Rab11 in the intracellular trafficking of TRPC6. Cayouette S, et al. Biochim Biophys Acta, 2010 Jul. PMID 20346379.

Coordination of Rab8 and Rab11 in primary ciliogenesis. Knöndler A, et al. Proc Natl Acad Sci U S A, 2010 Apr 6. PMID 20308558.

Rab11-FIP3 links the Rab11 GTPase and cytoplasmic dynein to mediate transport to the endosomal-recycling compartment. Horgan CP, et al. J Cell Sci, 2010 Jan 15. PMID 20026645.