

RAB11A Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP14530c

Specification

RAB11A Antibody (Center) - Product Information

Application Primary Accession Other Accession

Reactivity Predicted Host Clonality Isotype Calculated MW Antigen Region WB,E P62491 O35509, P46638, O15907, O3MHP2, P62494, P62493, O52NJ1, P62492, O5ZJN2, O2TA29, NP_004654.1 Human Bovine, Chicken, Mouse, Pig, Rabbit, Rat Rabbit Polyclonal Rabbit IgG 24394 88-116

RAB11A Antibody (Center) - Additional Information

Gene ID 8766

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

Target/Specificity

This RAB11A antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 88-116 amino acids from the Central region of human RAB11A.

Dilution WB~~1:1000 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

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

Precautions

RAB11A Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

RAB11A Antibody (Center) - 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, PubMed: 15689490, PubMed: 17462998, PubMed:19542231, PubMed:20026645, PubMed:20890297, PubMed:21282656, PubMed:26032412). The small Rab GTPase RAB11A regulates endocytic recycling (PubMed: 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). Acts as a major regulator of membrane delivery during cytokinesis (PubMed: 15601896). Together with MYO5B and RAB8A participates in epithelial cell polarization (PubMed: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). Together with MYO5B participates in CFTR trafficking to the plasma membrane and TF (Transferrin) recycling in nonpolarized cells (PubMed: 17462998). Required in a complex with MYO5B and RAB11FIP2 for the transport of NPC1L1 to the plasma membrane (PubMed: 19542231). Participates in the sorting and basolateral transport of CDH1 from the Golgi apparatus to the plasma membrane (PubMed: 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: 25673879, PubMed:<u>31204173</u>). On the contrary, upon LPAR1 receptor signaling pathway activation, interaction with phosphorylated WDR44 prevents Rab11-RAB3IP-RAB11FIP3 complex formation and cilia growth (PubMed:<u>31204173</u>). Participates in the export of a subset of neosynthesized proteins through a Rab8-Rab10-Rab11-endososomal 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. 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).

RAB11A Antibody (Center) - Protocols

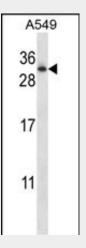
Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- <u>Dot Blot</u>
- Immunohistochemistry



- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

RAB11A Antibody (Center) - Images



RAB11A Antibody (Center) (Cat. #AP14530c) western blot analysis in A549 cell line lysates (35ug/lane).This demonstrates the RAB11A antibody detected the RAB11A protein (arrow).

RAB11A Antibody (Center) - 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.

RAB11A Antibody (Center) - References

Husebye, H., et al. Immunity 33(4):583-596(2010) Cayouette, S., et al. Biochim. Biophys. Acta 1803(7):805-812(2010) Reid, H.M., et al. J. Biol. Chem. 285(24):18709-18726(2010) Bruce, E.A., et al. J. Virol. 84(12):5848-5859(2010) Knodler, A., et al. Proc. Natl. Acad. Sci. U.S.A. 107(14):6346-6351(2010)