

Anti-Rab11 Family-Interacting Protein 3 (FIP3) (RABBIT) Antibody
Rab11 FIB3 Antibody
Catalog # ASR5393**Specification**

Anti-Rab11 Family-Interacting Protein 3 (FIP3) (RABBIT) Antibody - Product Information

Host	Rabbit
Conjugate	Unconjugated
Target Species	Human
Reactivity	Human
Clonality	Polyclonal
Application	WB, IHC, E, I, LCI
Application Note	This affinity purified antibody has been tested for use in ELISA and western blotting. Specific conditions for reactivity should be optimized by the end user. Although the predicted molecular weight of FIP3 is 82.4 kDa, a band corresponding to FIP3 was observed at 120 kDa in human cell lysates and at 150 kDa in mouse cell lysates. The identity of a 40 kDa band, observed in western blotting against both HeLa and 293T cell lysates, is unknown (personal communication, P. Randazzo, CCR-NCI, Bethesda, MD).
Physical State	Liquid (sterile filtered)
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Immunogen	This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a recombinant protein corresponding to amino acids spanning the carboxyl terminal one-third of human FIP3.
Preservative	0.01% (w/v) Sodium Azide

Anti-Rab11 Family-Interacting Protein 3 (FIP3) (RABBIT) Antibody - Additional Information**Gene ID** 9727**Other Names**
9727**Purity**

This affinity purified antibody is directed against human FIP3 protein. The product was affinity purified from monospecific antiserum by immunoaffinity chromatography. A BLAST analysis was used to suggest cross-reactivity with Rab11 protein from mouse based on approximately 92% protein:protein homology over the region of the immunizing sequence. Reactivity against homologues from other sources is not known.

Storage Condition

Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Precautions Note

This product is for research use only and is not intended for therapeutic or diagnostic applications.

Anti-Rab11 Family-Interacting Protein 3 (FIP3) (RABBIT) Antibody - Protein Information

Name RAB11FIP3 ([HGNC:17224](#))

Synonyms ARFO1, KIAA0665

Function

Downstream effector molecule for Rab11 GTPase which is involved in endocytic trafficking, cytokinesis and intracellular ciliogenesis by participating in membrane delivery (PubMed: [15601896](http://www.uniprot.org/citations/15601896), PubMed: [16148947](http://www.uniprot.org/citations/16148947), PubMed: [17394487](http://www.uniprot.org/citations/17394487), PubMed: [17628206](http://www.uniprot.org/citations/17628206), PubMed: [18511905](http://www.uniprot.org/citations/18511905), PubMed: [19327867](http://www.uniprot.org/citations/19327867), PubMed: [20026645](http://www.uniprot.org/citations/20026645), PubMed: [25673879](http://www.uniprot.org/citations/25673879), PubMed: [26258637](http://www.uniprot.org/citations/26258637), PubMed: [31204173](http://www.uniprot.org/citations/31204173)). Recruited by Rab11 to endosomes where it links Rab11 to dynein motor complex (PubMed: [20026645](http://www.uniprot.org/citations/20026645)). The functional Rab11- RAB11FIP3-dynein complex regulates the movement of peripheral sorting endosomes (SE) along microtubule tracks toward the microtubule organizing center/centrosome, generating the endocytic recycling compartment (ERC) during interphase of cell cycle (PubMed: [17394487](http://www.uniprot.org/citations/17394487), PubMed: [20026645](http://www.uniprot.org/citations/20026645)). Facilitates the interaction between dynein and dynactin and activates dynein processivity (PubMed: [25035494](http://www.uniprot.org/citations/25035494)). Binding with ASAP1 is needed to regulate the pericentrosomal localization of recycling endosomes (By similarity). The Rab11-RAB11FIP3 complex is also implicated in the transport during telophase of vesicles derived from recycling endosomes to the cleavage furrow via centrosome-anchored microtubules, where the vesicles function to deliver membrane during late cytokinesis and abscission (PubMed: [15601896](http://www.uniprot.org/citations/15601896), PubMed: [16148947](http://www.uniprot.org/citations/16148947)). The recruitment of Rab11-RAB11FIP3-containing endosomes to the cleavage furrow and tethering to the midbody is co-mediated by RAB11FIP3 interaction with ARF6-exocyst and RACGAP1-MKLP1 tethering complexes (PubMed: [17628206](http://www.uniprot.org/citations/17628206), PubMed: [18511905](http://www.uniprot.org/citations/18511905)). Also involved in the Rab11-Rabin8- Rab8 ciliogenesis cascade by facilitating the orderly assembly of a ciliary targeting complex containing Rab11, ASAP1, Rabin8/RAB3IP, RAB11FIP3 and ARF4, which directs preciliary vesicle trafficking to mother centriole and ciliogenesis initiation (PubMed: [26258637](http://www.uniprot.org/citations/26258637), PubMed: [31204173](http://www.uniprot.org/citations/31204173)). Also promotes the activity of Rab11 and ASAP1 in the ARF4-dependent Golgi-to-cilia transport of the sensory receptor rhodopsin (PubMed: [25673879](http://www.uniprot.org/citations/25673879))

target="_blank">25673879). Competes with WDR44 for binding to Rab11, which controls intracellular ciliogenesis pathway (PubMed:31204173). May play a role in breast cancer cell motility by regulating actin cytoskeleton (PubMed:19327867).

Cellular Location

Endosome membrane. Recycling endosome membrane; Peripheral membrane protein. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cleavage furrow Midbody. Golgi apparatus membrane; Peripheral membrane protein. Golgi apparatus, trans-Golgi network membrane; Peripheral membrane protein. Note=During interphase, localized in vesicles continuously moving from peripheral sorting endosomes in the cell towards the pericentrosomal endosomal recycling compartment (ERC) (PubMed:17394487, PubMed:20026645). In early mitosis remains diffuse and distributed through the cell. The onset of anaphase sequesters these vesicles to the centrosomes at the opposite poles of the cell During telophase these vesicles move from the centrosomes, to the furrow, and then to the midbody to aid in abscission (PubMed:15158446, PubMed:15601896, PubMed:18511905). Interaction with Rab11 mediates localization to endosomes (PubMed:11495908). Interaction with ARF6 mediates localization to the midbody (PubMed:16148947). Localized to the Golgi and TGN when interacting with RHO in photoreceptors (PubMed:25673879). Localized to rhodopsin transport carriers when interacting with RAB11A and ASAP1 in photoreceptors (PubMed:25673879)

Anti-Rab11 Family-Interacting Protein 3 (FIP3) (RABBIT) 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-Rab11 Family-Interacting Protein 3 (FIP3) (RABBIT) Antibody - Images

Anti-Rab11 Family-Interacting Protein 3 (FIP3) (RABBIT) Antibody - Background

This antibody is designed, produced, and validated as part of a collaboration between Rockland and the National Cancer Institute (NCI). Rab11 Family-Interacting Protein 3 (FIP3)/Arfophilin-1 and FIP4/Arfophilin-2 are dual effectors for Rab11 and the ADP-ribosylation factor Arf6. Rab11 and Arf6 are involved in membrane delivery from recycling endosomes to the plasma membrane during cytokinesis. The dual Rab11/Arf6 binding proteins, FIP3 and FIP4, function in the delivery of recycling endosomes to the cleavage furrow and are, together with Rab11, essential for completion of abscission, the terminal step of cytokinesis. An interaction between Rab11-FIP3 and ASAP1 has also been identified. ASAP1 is an Arf GTPase-activating protein that has been implicated in the invasive properties of uveal melanoma and mammary carcinoma. Therefore, may play a role in breast cancer cell motility by regulating actin cytoskeleton. Also, acts as an adapter protein linking the dynein motor complex to various cargos and converts dynein from a non-processive to a highly processive motor in the presence of dynactin. Facilitates the interaction between dynein and dynactin and activates dynein processivity (the ability to move along a microtubule for a long distance without falling off the track). Anti-Rab11 Antibody is useful for researchers interested in organelle transport, endocytosis, and cancer research.