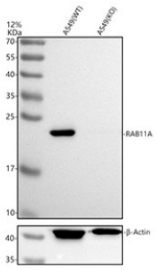
RAB11A Antibody CAI-18 / RAB11A Rabbit Monoclonal Antibody [clone CAI-18] (FY13704)

Catalog No.	Formulation	Size
FY13704	Rabbit IgG in stabilizing components, phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol	100 ul

Recombinant RABBIT MONOCLONAL

Bulk quote request

Species Reactivity	Human
Format	Liquid
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	CAI-18
Purity	Affinity purified
UniProt	P62491
Applications	Western blot: 1:500
Limitations	This RAB11A Antibody CAI-18 / RAB11A Rabbit Monoclonal Antibody is available for research use only.



RAB11A Antibody CAI-18 WB Analysis of A549 WT and RAB11A KO Cells. Western blot analysis of wild-type (WT) and RAB11A-knockout (KO) human A549 whole-cell lysates using RAB11A Rabbit Monoclonal Antibody clone CAI-18 at a 1:500 dilution. A prominent immunoreactive band at approximately 24 kDa is detected in WT lysate but is absent in the KO sample, supporting RAB11A-specific detection at the expected molecular weight. No appreciable additional bands are visible under the tested conditions. Beta-actin bands of comparable intensity serve as loading controls.

Description

RAB11A Antibody CAI-18 / RAB11A Rabbit Monoclonal Antibody recognizes RAB11A, a member of the Rab family of small GTPases that regulates intracellular membrane transport and the recycling of endocytosed proteins. RAB11A is particularly associated with recycling endosomes, which function as sorting and transport compartments for membrane proteins returning to the cell surface. By coordinating the movement of these compartments, RAB11A helps maintain the distribution of receptors, transporters, and adhesion molecules required for normal cellular signaling and membrane

organization.

RAB11A functions as a molecular switch through regulated cycling between GTP-bound and GDP-bound states. Guanine nucleotide exchange factors promote activation by facilitating GTP loading, while GTPase-activating proteins accelerate GTP hydrolysis and return the protein to its inactive state. Active RAB11A recruits effector proteins that organize vesicle transport, membrane tethering, and cargo delivery. These include members of the Rab11 family-interacting protein (RAB11FIP) family, which connect RAB11A-positive compartments to additional trafficking regulators and cytoskeletal transport machinery.

Through its interactions with molecular motors and membrane-associated effectors, RAB11A contributes to the movement of recycling vesicles along cytoskeletal structures. These processes are particularly important in polarized epithelial cells, where proteins must be delivered to specific membrane domains to maintain tissue organization. RAB11A also participates in cytokinesis, supporting the redistribution of membrane components toward the cleavage furrow and intercellular bridge during cell division. Its trafficking functions influence receptor signaling, regulated secretion, and the organization of intracellular membrane compartments.

Changes in RAB11A activity can affect receptor availability at the cell surface, alter intracellular signaling, and disrupt normal vesicle transport. RAB11A has therefore attracted interest in studies of cancer cell behavior, epithelial development, and host-pathogen interactions. Although RAB11A shares substantial sequence similarity with RAB11B, these proteins are encoded by separate genes and can have distinct cellular functions. RAB11A Antibody CAI-18 provides a reagent for investigating Rab11A protein expression and the molecular mechanisms governing recycling endosome function, membrane trafficking, and cellular polarity.

Explore additional Cell Biology Antibodies for investigating intracellular membrane trafficking, endosomal recycling, and vesicle transport.

Application Notes

Optimal dilution of the RAB11A Antibody CAI-18 / RAB11A Rabbit Monoclonal Antibody should be determined by the researcher.

Immunogen

A synthesized peptide derived from human Ras-related protein Rab-11A was used as the immunogen for the RAB11A Antibody CAI-18.

Storage

The RAB11A Antibody CAI-18 can be stored at -20oC.

Alternate Names

Rab11A antibody, RAB11 antibody, Rab-11A antibody, Ras-related protein Rab-11A antibody, Rab11A small GTPase antibody, Rab11A recycling endosome antibody

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