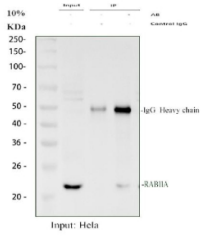
RAB11A Antibody (R31406)

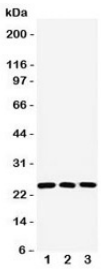
Catalog No.	Formulation	Size
R31406	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-2 days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide/thimerosal
UniProt	P62491
Applications	Western Blot : 0.5-1ug/ml Immunoprecipitation : 2ug per 500ug of lysate
Limitations	This RAB11A antibody is available for research use only.



Immunoprecipitation of RAB11A protein from 500ug of human HeLa whole cell lysate with 2ug of RAB11A antibody.



Western blot testing of RAB11A antibody and Lane 1: human HeLa; 2: mouse NIH3T3; 3: human A431 lysate. Expected molecular weight ~24 kDa.

Description

RAB11A (Ras-related protein Rab-11A) is a small GTP-binding protein that belongs to the Rab family, which regulates intracellular membrane trafficking. RAB11 is primarily associated with the recycling endosome, where it controls the recycling of proteins and lipids back to the plasma membrane. This function is essential for processes such as receptor trafficking, cytokinesis, and maintenance of cell polarity. A RAB11A antibody is widely used to study endosomal transport and recycling pathways.

As a molecular switch, RAB11A cycles between an active GTP-bound form and an inactive GDP-bound form. In its active state, it recruits effector proteins that mediate vesicle budding, movement, and fusion. By regulating transport of receptors such as transferrin and integrins, RAB11A plays a vital role in nutrient uptake, adhesion, and signal transduction. Researchers employ a RAB11A antibody to explore these trafficking processes and their contributions to cell physiology.

RAB11A has also been implicated in diverse biological processes beyond vesicle trafficking. It influences epithelial morphogenesis, ciliogenesis, and immune responses by directing membrane flow to specific subcellular locations. Dysregulation of RAB11A function has been linked to cancer progression, infectious disease, and neurological disorders, where altered endosomal trafficking disrupts signaling and cell homeostasis. Using a RAB11A antibody allows for precise detection of its expression and localization in these research contexts.

NSJ Bioreagents provides a high-quality RAB11A antibody validated for applications such as western blot, immunohistochemistry, and immunofluorescence. Choosing a validated RAB11A antibody from NSJ Bioreagents ensures reproducibility and accuracy in studies of membrane trafficking, recycling endosomes, and disease mechanisms.

Application Notes

The stated application concentrations are suggested starting amounts. Titration of the RAB11A antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

An amino acid sequence from the C-terminus of human RAB11A (NVVPIHVPPTTENKPKVQ) was used as the immunogen for this RAB11A antibody (100% homologous in human, mouse and rat).

Storage

After reconstitution, the RAB11A antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.