

RAB14 Antibody

Purified Mouse Monoclonal Antibody (Mab)
Catalog # AM8601b

Specification

RAB14 Antibody - Product Information

Application WB,E
Primary Accession P61106

Other Accession Q5ZKU5, Q91V41, Q5R8Z8

Reactivity Human

Predicted Chicken, Mouse

Host Mouse
Clonality monoclonal
Isotype IgG1,k
Calculated MW 23897

RAB14 Antibody - Additional Information

Gene ID 51552

Other Names

Ras-related protein Rab-14, RAB14

Target/Specificity

This RAB14 antibody is generated from a mouse immunized with a recombinant protein of human RAB14.

Dilution

WB~~1:2000

E~~Use at an assay dependent concentration.

Format

Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.

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

RAB14 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

RAB14 Antibody - Protein Information

Name RAB14 (<u>HGNC:16524</u>)

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:22595670). Involved in membrane trafficking between the Golgi complex and endosomes during early embryonic development (By similarity). Regulates the Golgi to endosome transport of FGFR-containing vesicles during early development, a key process for developing basement membrane and epiblast and primitive endoderm lineages during early postimplantation development. May act by modulating the kinesin KIF16B-cargo association to endosomes (By similarity). Regulates, together with its guanine nucleotide exchange factor DENND6A, the specific endocytic transport of ADAM10, N-cadherin/CDH2 shedding and cell-cell adhesion (PubMed:22595670). Mediates endosomal tethering and fusion through the interaction with RUFY1 and RAB4B (PubMed:20534812). Interaction with RAB11FIP1 may function in the process of neurite formation (PubMed:26032412).

Cellular Location

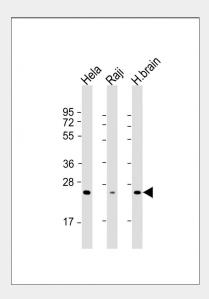
Recycling endosome. Early endosome membrane; Lipid-anchor; Cytoplasmic side. Golgi apparatus membrane; Lipid-anchor; Cytoplasmic side. Golgi apparatus, trans-Golgi network membrane; Lipid-anchor; Cytoplasmic side. Cytoplasmic vesicle, phagosome. Cytoplasmic vesicle. Note=Recruited to recycling endosomes by DENND6A (PubMed:22595670). Recruited to phagosomes containing S.aureus or M.tuberculosis (PubMed:21255211). Colocalizes with RAB11FIP1 on punctate vesicles (PubMed:26032412).

RAB14 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

RAB14 Antibody - Images



All lanes: Anti-RAB14 Antibody at 1:2000 dilution Lane 1: Hela whole cell lysate Lane 2: Raji



whole cell lysate Lane 3: human brain lysate Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 24 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

RAB14 Antibody - Background

Involved in membrane trafficking between the Golgi complex and endosomes during early embryonic development. Regulates the Golgi to endosome transport of FGFR-containing vesicles during early development, a key process for developing basement membrane and epiblast and primitive endoderm lineages during early postimplantation development. May act by modulating the kinesin KIF16B-cargo association to endosomes (By similarity). Regulates, together with its guanine nucleotide exchange factor DENND6A, the specific endocytic transport of ADAM10, N-cadherin/CDH2 shedding and cell-cell adhesion.

RAB14 Antibody - References

Proikas-Cezanne T.,et al.Submitted (MAY-1999) to the EMBL/GenBank/DDBJ databases. Ren Y.,et al.Submitted (NOV-1999) to the EMBL/GenBank/DDBJ databases. Huang Y.-P.,et al.Submitted (FEB-2004) to the EMBL/GenBank/DDBJ databases. Hu R.-M.,et al.Proc. Natl. Acad. Sci. U.S.A. 97:9543-9548(2000). Bechtel S.,et al.BMC Genomics 8:399-399(2007).