

Anti-RAB21 (AcK109) Antibody

Rabbit polyclonal antibody to RAB21 (AcK109) Catalog # AP61505

Specification

Anti-RAB21 (AcK109) Antibody - Product Information

Application WB
Primary Accession O9UL25

Reactivity Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Calculated MW 24348

Anti-RAB21 (AcK109) Antibody - Additional Information

Gene ID 23011

Other Names

KIAA0118; Ras-related protein Rab-21

Target/Specificity

Recognizes endogenous levels of RAB21 with a site at AcK109 protein.

Dilution

WB~~WB (1/500 - 1/1000)

Format

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage

Store at -20 °C. Stable for 12 months from date of receipt

Anti-RAB21 (AcK109) Antibody - Protein Information

Name RAB21 (<u>HGNC:18263</u>)

Synonyms KIAA0118

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 sets of downstream effectors directly responsible for vesicle formation, movement, tethering and fusion (PubMed:18804435, PubMed:25648148, PubMed:31455601). RAB21 is involved in membrane trafficking control (PubMed:<a



href="http://www.uniprot.org/citations/18804435" target="_blank">18804435, PubMed:25648148). During the mitosis of adherent cells, controls the endosomal trafficking of integrins which is required for the successful completion of cytokinesis (PubMed:18804435). Regulates integrin internalization and recycling, but does not influence the traffic of endosomally translocated receptors in general (By similarity). As a result, may regulate cell adhesion and migration (By similarity). Involved in neurite growth (By similarity). Following SBF2/MTMT13-mediated activation in response to starvation-induced autophagy, binds to and regulates SNARE protein VAMP8 endolysosomal transport required for SNARE-mediated autophagosome-lysosome fusion (PubMed:25648148). Modulates protein levels of the cargo receptors TMED2 and TMED10, and required for appropriate Golgi localization of TMED10 (PubMed:31455601/a>).

Cellular Location

Endoplasmic reticulum membrane; Lipid-anchor. Golgi apparatus, trans-Golgi network. Golgi apparatus membrane. Early endosome membrane. Cytoplasmic vesicle membrane. Cleavage furrow. Cell projection, neuron projection {ECO:0000250|UniProtKB:P35282}. Note=Colocalizes with ANKRD27 and VAMP7 in neurites (By similarity). In nonpolarized epithelial Caco-2 cells, found in the endoplasmic reticulum; in polarized cells, observed in vesicles in the apical cytoplasm (PubMed:10887961). During mitosis, in mid-telophase, localized in the ingressing cleavage furrow (PubMed:18804435). In late telophase, detected at the opposite poles of the daughter cells, in vesicles at the base of lamellipodia formed by the separating daughter cells (PubMed:18804435) {ECO:0000250|UniProtKB:P35282, ECO:0000269|PubMed:10887961, ECO:0000269|PubMed:18804435}

Tissue Location

Widely expressed. In jejunal tissue, predominantly expressed in the apical region of the epithelial cell layer of the villi, weak expression, if any, in the crypt epithelium. Capillary endothelium and some cell types in the lamina propria also show expression.

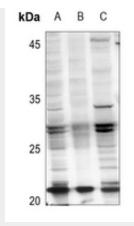
Anti-RAB21 (AcK109) Antibody - Protocols

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

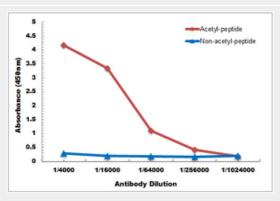
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

Anti-RAB21 (AcK109) Antibody - Images





Western blot analysis of RAB21 (AcK109) expression in HepG2 (A), Jurkat (B), CT26 (C) whole cell lysates.



Direct ELISA antibody dose-response curve using Anti-RAB21 (AcK109) Antibody. Antigen (acetyl-peptide and non-acetyl-peptide) concentration is 5 ug/ml. Goat Anti-Rabbit IgG (H&L) - HRP was used as the secondary antibody, and signal was developed by TMB substrate.

Anti-RAB21 (AcK109) Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human RAB21 with a site at AcK109. The exact sequence is proprietary.