10320 Camino Santa Fe, Suite G San Diego, CA 92121 Tel: 858.875.1900 Fax: 858.875.1999



# Anti-RAB21 (AcK109) Antibody

Rabbit polyclonal antibody to RAB21 (AcK109) Catalog # AP61505

#### **Product Information**

Application WB
Primary Accession Q9UL25

**Reactivity** Human, Mouse, Rat

HostRabbitClonalityPolyclonalCalculated MW24348

### **Additional Information**

**Gene ID** 23011

Other Names KIAA0118; Ras-related protein Rab-21

**Target/Specificity** KLH-conjugated synthetic peptide encompassing a sequence within the center

region of human RAB21 with a site at AcK109. The exact sequence is

proprietary.

**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

## **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: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).

#### **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}

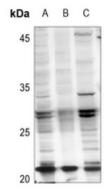
#### **Tissue Location**

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.

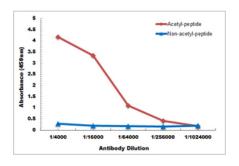
## **Background**

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

## **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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.