

RAB21 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP13377b

Specification

RAB21 Antibody (C-term) - Product Information

Application IHC-P, WB,E Primary Accession O9UL25

Other Accession <u>Q6AXT5</u>, <u>P35282</u>, <u>Q17R06</u>, <u>NP 055814.1</u>

Reactivity Human

Predicted Bovine, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 24348
Antigen Region 168-197

RAB21 Antibody (C-term) - Additional Information

Gene ID 23011

Other Names

Ras-related protein Rab-21, RAB21, KIAA0118

Target/Specificity

This RAB21 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 168-197 amino acids from the C-terminal region of human RAB21.

Dilution

IHC-P~~1:10~50 WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

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

RAB21 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

RAB21 Antibody (C-term) - 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.

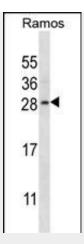
RAB21 Antibody (C-term) - Protocols

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

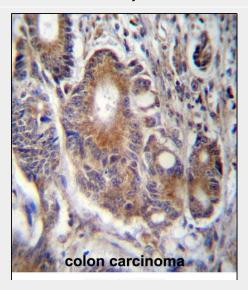
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

RAB21 Antibody (C-term) - Images





RAB21 Antibody (C-term) (Cat. #AP13377b) western blot analysis in Ramos cell line lysates (35ug/lane). This demonstrates the RAB21 antibody detected the RAB21 protein (arrow).



RAB21 Antibody (C-term) (Cat. #AP13377b)immunohistochemistry analysis in formalin fixed and paraffin embedded human colon carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of RAB21 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

RAB21 Antibody (C-term) - Background

RAB21 belongs to the RAB family of small GTP-binding proteins that regulate intracellular vesicle targeting (Opdam et al., 2000 [PubMed 10887961]).

RAB21 Antibody (C-term) - References

Burgo, A., et al. EMBO Rep. 10(10):1117-1124(2009)
Pellinen, T., et al. Dev. Cell 15(3):371-385(2008)
Delprato, A., et al. Nat. Struct. Mol. Biol. 14(5):406-412(2007)
Pellinen, T., et al. J. Cell Biol. 173(5):767-780(2006)
Eathiraj, S., et al. Nature 436(7049):415-419(2005)