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RAB21 Antibody (C-term) Blocking peptide

Synthetic peptide
Catalog # BP13377b

Specification

RAB21 Antibody (C-term) Blocking peptide - Product Information

Primary Accession Q9UL25

RAB21 Antibody (C-term) Blocking peptide - Additional Information

Gene ID 23011

Other Names
Ras-related protein Rab-21, RAB21, KIAA0118

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP13377b was selected from the C-term region of RAB21. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

RAB21 Antibody (C-term) Blocking peptide - Protein Information

Name RAB21 (HGNC:18263)

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) Blocking peptide - Protocols

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

- Blocking Peptides

RAB21 Antibody (C-term) Blocking peptide - Images

RAB21 Antibody (C-term) Blocking peptide - Background

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

RAB21 Antibody (C-term) Blocking peptide - 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)