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

RAB21 Antibody

Purified Mouse Monoclonal Antibody (Mab)
Catalog # AM8573b

Product Information

Application	WB, E
Primary Accession	Q9UL25
Reactivity	Human, Rat, Mouse, Green Monkey
Host	Mouse
Clonality	monoclonal
Isotype	IgG2b,κ
Clone Names	1701CT536.68.39
Calculated MW	24348

Additional Information

Gene ID	23011
Other Names	Ras-related protein Rab-21, RAB21, KIAA0118
Target/Specificity	This RAB21 antibody is generated from a mouse immunized with a recombinant protein between 1-225 amino acids from the human RAB21.
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	RAB21 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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.

Background

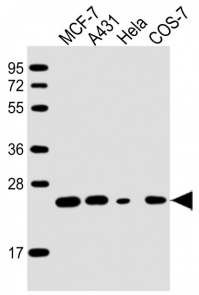
Regulates integrin internalization and recycling, but does not influence the traffic of endosomally translocated receptors in general. As a result, may regulate cell adhesion and migration (By similarity). During the mitosis of adherent cells, controls the endosomal trafficking of integrins which is required for the successful completion of cytokinesis. Involved in neurite growth (By similarity).

References

Opdam F.J.M.,et al.Eur. J. Cell Biol. 79:308-316(2000).
Bienvenut W.V.,et al.Submitted (JUN-2005) to UniProtKB.
Nagase T.,et al.DNA Res. 2:37-43(1995).
Simpson J.C.,et al.J. Cell Sci. 117:6297-6311(2004).
Zhang X.,et al.J. Cell Sci. 119:1053-1062(2006).

Images

All lanes : Anti-RAB21 Antibody at 1:2000 dilution Lane 1: MCF-7 whole cell lysate Lane 2: A431 whole cell lysate Lane 3: Hela whole cell lysate Lane 4: COS-7 whole cell lysate Lysates/proteins at 20 µg 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.