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RAB1B Antibody

Purified Mouse Monoclonal Antibody (Mab)
Catalog # AM8550b

Product Information

Application	WB, E
Primary Accession	Q9H0U4
Other Accession	Q5RE13
Reactivity	Human, Rat, Mouse
Host	Mouse
Clonality	monoclonal
Isotype	IgG1,k
Clone Names	1673CT571.17.71
Calculated MW	22171

Additional Information

Gene ID	81876
Other Names	Ras-related protein Rab-1B, RAB1B
Target/Specificity	This RAB1B antibody is generated from a mouse immunized with a recombinant protein between 1-201 amino acids from human RAB1B.
Dilution	WB~~1:4000 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	RAB1B Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	RAB1B (HGNC:18370)
Function	The small GTPases Rab are key regulators of intracellular membrane trafficking, from the formation of transport vesicles to their fusion with membranes (PubMed:20545908, PubMed:9437002, PubMed:23236136). Rabs cycle between an inactive GDP-bound form and an active GTP-bound form that is able to recruit to membranes different set of downstream effectors directly responsible for vesicle formation, movement, tethering and fusion

	(PubMed:9437002). Plays a role in the initial events of the autophagic vacuole development which take place at specialized regions of the endoplasmic reticulum (PubMed:20545908). Regulates vesicular transport between the endoplasmic reticulum and successive Golgi compartments (By similarity). Required to modulate the compacted morphology of the Golgi (PubMed:26209634). Promotes the recruitment of lipid phosphatase MTMR6 to the endoplasmic reticulum- Golgi intermediate compartment (By similarity).
Cellular Location	Cytoplasm. Membrane; Lipid-anchor; Cytoplasmic side. Preautophagosomal structure membrane; Lipid-anchor; Cytoplasmic side. Cytoplasm, perinuclear region {ECO:0000250|UniProtKB:P10536}. Note=Targeted by REP1 to membranes of specific subcellular compartments including endoplasmic reticulum, Golgi apparatus, and intermediate vesicles between these two compartments (PubMed:11389151). In the GDP-form, colocalizes with GDI in the cytoplasm (PubMed:11389151). Co-localizes with MTMR6 to the endoplasmic reticulum-Golgi intermediate compartment and to the peri-Golgi region (By similarity). {ECO:0000250|UniProtKB:P10536, ECO:0000269|PubMed:11389151}

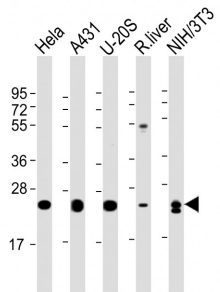
Background

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 set of downstream effectors directly responsible for vesicle formation, movement, tethering and fusion. RAB1B regulates vesicular transport between the endoplasmic reticulum and successive Golgi compartments. Plays a role in the initial events of the autophagic vacuole development which take place at specialized regions of the endoplasmic reticulum.

References

Zhao Y.,et al.Submitted (SEP-1998) to the EMBL/GenBank/DDBJ databases.
Wiemann S.,et al.Genome Res. 11:422-435(2001).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Bienvenut W.V.,et al.Submitted (JUN-2005) to UniProtKB.
Wilson A.L.,et al.Biochem. J. 318:1007-1014(1996).

Images



All lanes : Anti-RAB1B Antibody at 1:4000 dilution Lane 1: Hela whole cell lysate Lane 2: A431 whole cell lysate Lane 3: U-20S whole cell lysate Lane 4: rat liver lysate Lane 5: NIH/3T3 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 : 22 kDa Blocking/Dilution buffer: 5% NFDM/TBST.