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

Rab1b Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO2225a

Product Information

Application	WB, IHC, FC, E
Primary Accession	Q9H0U4
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	7A12G2
Isotype	IgG2b
Calculated MW	22171
Description	Members of the RAB protein family, such as RAB1B, are low molecular mass monomeric GTPases localized on the cytoplasmic surfaces of distinct membrane-bound organelles. RAB1B functions in the early secretory pathway and is essential for vesicle transport between the endoplasmic reticulum (ER) and Golgi
Immunogen	Purified recombinant fragment of human Rab1b (AA: 60-201) expressed in E. Coli.
Formulation	Purified antibody in PBS with 0.05% sodium azide

Additional Information

Gene ID	81876
Other Names	Ras-related protein Rab-1B, RAB1B
Dilution	WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 FC~~1/200 - 1/400 E~~1/10000
Storage	Maintain refrigerated at 2-8°C for up to 6 months. 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}

References

1.Mol Biol Cell. 2013 Mar;24(5):617-32.2.Eur J Cell Biol. 2011 Apr;90(4):301-11.

Images