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

RAB1B Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP13810b

Product Information

Application	IHC-P-Leica, WB, E
Primary Accession	Q9H0U4
Other Accession	Q92928, P10536, Q06AU7, Q9D1G1, Q4R8X3, Q2HJH2, NP_112243.1
Reactivity	Human, Rat, Mouse
Predicted	Mouse, Rat, Monkey, Pig, Bovine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB31297
Calculated MW	22171
Antigen Region	166-194

Additional Information

Gene ID	81876
Other Names	Ras-related protein Rab-1B, RAB1B
Target/Specificity	This RAB1B antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 166-194 amino acids from the C-terminal region of human RAB1B.
Dilution	IHC-P-Leica~~1:500 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	RAB1B Antibody (C-term) 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}

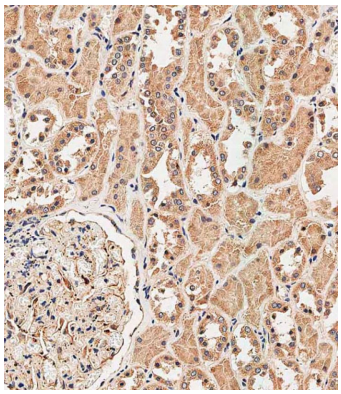
Background

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 (Chen et al., 1997 [PubMed 9030196]; Alvarez et al., 2003 [PubMed 12802079]).[supplied by OMIM].

References

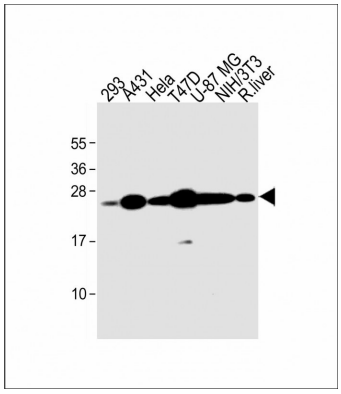
Yamayoshi, S., et al. J. Virol. 84(9):4816-4820(2010)
Machner, M.P., et al. Science 318(5852):974-977(2007)
Monetta, P., et al. Mol. Biol. Cell 18(7):2400-2410(2007)
Wu, C., et al. Proteomics 7(11):1775-1785(2007)
Ewing, R.M., et al. Mol. Syst. Biol. 3, 89 (2007) :

Images



Immunohistochemical analysis of paraffin-embedded human kidney tissue using AP13810b performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:500) for 1 hours at room temperature. A undiluted biotinylated CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.

All lanes : Anti-RAB1B Antibody (C-term) at 1:2000 dilution Lane 1: 293 whole cell lysate Lane 2: A431 whole



cell lysate Lane 3: Hela whole cell lysate Lane 4: T47D whole cell lysate Lane 5: U-87 MG whole cell lysate Lane 6: NIH/3T3 whole cell lysate Lane 7: rat liver lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 22 kDa Blocking/Dilution buffer: 5% NFDM/TBST.