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Anti-RAB7L1 Antibody

Catalog # AP59762

Product Information

Application	WB, IF/IC
Primary Accession	O14966
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	23155

Additional Information

Gene ID	8934
Other Names	Ras-related protein Rab-7L1; Rab-7-like protein 1
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human RAB7L1. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	RAB29 (HGNC:9789)
Synonyms	RAB7L1
Function	The small GTPases Rab are key regulators of intracellular membrane trafficking, from the formation of transport vesicles to their fusion with membranes (PubMed:24788816). 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 (By similarity). RAB29 is essential for maintaining the integrity of the endosome-trans- Golgi network structure (By similarity). Together with LRRK2, plays a role in the retrograde trafficking pathway for recycling proteins, such as mannose 6 phosphate receptor (M6PR), between lysosomes and the Golgi apparatus in a retromer-dependent manner (PubMed:24788816). Recruits LRRK2 to the Golgi complex and stimulates LRRK2 kinase activity (PubMed:29212815, PubMed:38127736). Stimulates phosphorylation of RAB10 'Thr-73' by LRRK2 (PubMed:38127736). Regulates neuronal process morphology in the intact central nervous system

(CNS) (By similarity). May play a role in the formation of typhoid toxin transport intermediates during Salmonella enterica serovar Typhi (S.typhi) epithelial cell infection (PubMed:22042847).

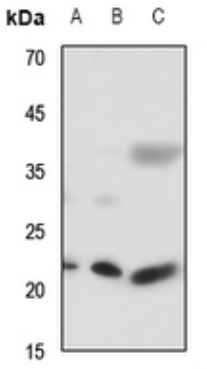
Cellular Location

Cell membrane; Lipid-anchor; Cytoplasmic side. Cytoplasm. Cytoplasm, perinuclear region. Golgi apparatus. Golgi apparatus membrane. Golgi apparatus, trans-Golgi network. Vacuole. Cytoplasm, cytoskeleton. Note=Colocalizes with LRRK2 along tubular structures emerging from Golgi apparatus (PubMed:29212815) Colocalizes with GM130 at the Golgi apparatus (PubMed:22042847) Colocalizes with dynamic tubules emerging from and retracting to the Golgi apparatus (PubMed:22042847, PubMed:38127736). Colocalizes with TGN46 at the trans-Golgi network (TGN) (PubMed:24788816). In Salmonella enterica serovar Typhi (S.typhi) infected epithelial cells, is recruited and colocalized with both S.typhi-containing vacuoles and dynamic tubules as well as those emerging from the vacuole toward the cell periphery (PubMed:22042847).

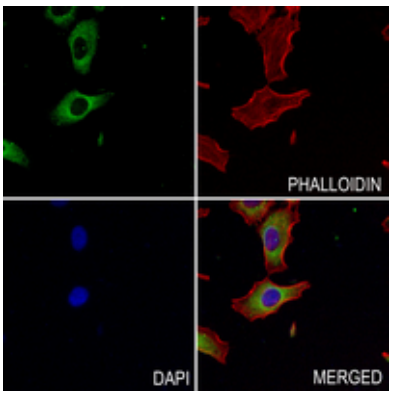
Tissue Location

Ubiquitous..

Images



Western blot analysis of RAB7L1 expression in mouse lung (A), mouse kidney (B), rat kidney (C) whole cell lysates. (Predicted band size: 23 kD; Observed band size: 23 kD)



Immunofluorescent analysis of RAB7L1 staining in HepG2 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

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