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

RAB7L1 Antibody

Purified Mouse Monoclonal Antibody (Mab)
Catalog # AM8642b

Product Information

Application	WB, E
Primary Accession	O14966
Other Accession	Q5R7A4
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit, Chicken
Host	Mouse
Clonality	monoclonal
Isotype	IgG1
Clone Names	1789CT823.71.1.1
Calculated MW	23155

Additional Information

Gene ID	8934
Other Names	Ras-related protein Rab-7L1, Rab-7-like protein 1, Ras-related protein Rab-29, RAB29, RAB7L1
Target/Specificity	This RAB7L1 antibody is generated from a mouse immunized with a recombinant protein of human RAB7L1.
Dilution	WB~~1:1000-1:2000 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	RAB7L1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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..

Background

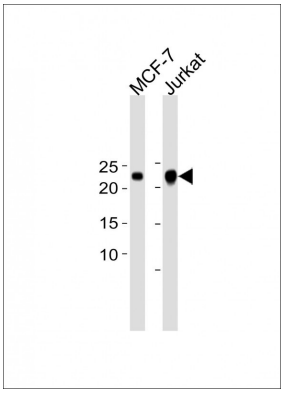
Rab GTPase key regulator in vesicle trafficking. Essential for maintaining the integrity of the endosome-trans- Golgi network structure. Together with LRRK2, plays a role in the retrograde trafficking pathway for recycling proteins, such as mannose 6 phosphate receptor (M6PR), between lysosomes and the Golgi apparatus in a retromer-dependent manner. Regulates neuronal process morphology in the intact central nervous system (CNS). May play a role in the formation of typhoid toxin transport intermediates during Salmonella enterica serovar Typhi (S.Typhi) epithelial cell infection.

References

Shimizu F.,et al.Cytogenet. Cell Genet. 77:261-263(1997).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Gregory S.G.,et al.Nature 441:315-321(2006).
Dephoure N.,et al.Proc. Natl. Acad. Sci. U.S.A. 105:10762-10767(2008).
Olsen J.V.,et al.Sci. Signal. 3:RA3-RA3(2010).

Images

All lanes: Anti-RAB7L1 Antibody at 1:1000 dilution Lane 1: MCF-7 whole cell lysate Lane 2: Jurkat whole cell lysate Lysates/proteins at 20 µg per lane. Secondary: Goat Anti-Mouse IgG, (H+L), Peroxidase conjugated (ASP1613) at 1/8000 dilution. Observed band size: 23 KDa



Blocking/Dilution buffer: 5% NFDM/TBST.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.