

#### **RAB7L1 Antibody**

Purified Mouse Monoclonal Antibody (Mab) Catalog # AM8642b

#### Specification

# **RAB7L1 Antibody - Product Information**

B,E
<u>14966</u>
<u>5R7A4</u>
uman
ouse
onoclonal
G1
8155

# **RAB7L1 Antibody - 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.

# **RAB7L1 Antibody - Protein Information**

Name RAB29

Synonyms RAB7L1

Function The small GTPases Rab are key regulators in vesicle trafficking (PubMed: 24788816).



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:<u>24788816</u>). Recruits LRRK2 to the Golgi complex and stimulates LRRK2 kinase activity (PubMed:<u>29212815</u>, PubMed:<u>38127736</u>). Stimulates phosphorylation of RAB10 'Thr-73' by LRRK2 (PubMed:<u>38127736</u>). 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:<u>22042847</u>).

#### **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..

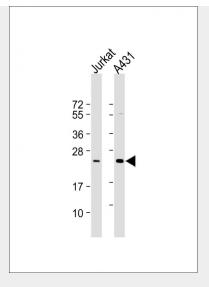
#### **RAB7L1 Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

**RAB7L1 Antibody - Images** 





All lanes : Anti-RAB7L1 Antibody at 1:1000-1:2000 dilution Lane 1: Jurkat whole cell lysate Lane 2: A431 whole cell lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 23 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

# RAB7L1 Antibody - 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.

# **RAB7L1 Antibody - 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).