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Rab29 Rabbit mAb

Catalog # AP76682

Product Information

Application	WB, IP
Primary Accession	O14966
Reactivity	Human
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Purification	Affinity Purified
Calculated MW	23155

Additional Information

Gene ID	8934
Other Names	RAB29
Dilution	WB~~1:1000 IP~~N/A
Format	Liquid in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

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.

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