

Anti-RAB39A Antibody

Catalog # AP53771

Product Information

Application	WB
Primary Accession	Q14964
Reactivity	Human, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	25007

Additional Information

Gene ID	54734
Other Names	RAB39; Ras-related protein Rab-39A; Rab-39
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human RAB39A. The exact sequence is proprietary.
Dilution	WB~~1/500 - 1/1000
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

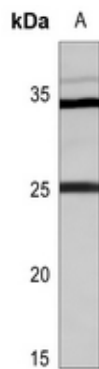
Name	RAB39A (HGNC:16521)
Synonyms	RAB39
Function	The small GTPases Rab are key regulators of intracellular membrane trafficking, from the formation of transport vesicles to their fusion with membranes (PubMed:21255211). Rabs cycle between an inactive GDP-bound form and an active GTP-bound form that is able to recruit to membranes different sets of downstream effectors directly responsible for vesicle formation, movement, tethering and fusion (PubMed:21255211). RAB39A regulates autophagosome-lysosome fusion via recruitment of the HOPS endosomal tethering complex onto lysosomes; this process involves lysosomal RAB39A and autophagosomal RAB2A recruitment of HOPS subcomplexes VPS41-VPS16-VPS18-VPS33A and VPS39- VPS11, respectively, which assemble into a functional complex to mediate membrane tethering and SNAREs-driven membrane fusion (PubMed:37821429). Also negatively regulates lipopolysaccharide (LPS)- induced autophagosome formation in macrophages, possibly by implicating PI3K (PubMed:24349490). Promotes the

delivery of MHC-I molecules from the ER to phagosomes and the generation of peptide-loaded MHC-I complexes in phagosomes, thus enhancing antigen cross-presentation by dendritic cells (By similarity). Plays a role in the maturation and acidification of phagosomes that engulf pathogens, such as *S.aureus* and *M.tuberculosis* (PubMed:[21255211](#)). Plays a role in the fusion of phagosomes with lysosomes (PubMed:[21255211](#)). May be involved in multiple neurite formation (By similarity).

Cellular Location

Cell membrane; Lipid-anchor; Cytoplasmic side. Cytoplasmic vesicle, phagosome membrane; Lipid-anchor; Cytoplasmic side. Lysosome membrane. Autolysosome membrane. Note=Recruited to phagosomes containing *S.aureus* or *M.tuberculosis* (PubMed:21255211). Majorly localized on lysosomes under basal conditions (PubMed:37821429). Majorly localized on autophagosomes/autolysosomes under autophagy-induced conditions (PubMed:37821429). Colocalized with VPS39 and VPS41 on lysosomes or autolysosomes (PubMed:37821429). Colocalized with STX17 on autolysosomes in autophagy-induced conditions (PubMed:37821429) Localized (GTP-bound) to phagosomes in dendritic cells; shuttles vesicles from the ER-Golgi to the phagosome (By similarity)
{ECO:0000250|UniProtKB:Q8BHD0, ECO:0000269|PubMed:21255211, ECO:0000269|PubMed:37821429}

Images



Western blot analysis of RAB39A expression in PC12 (A) whole cell lysates. (Predicted band size: 25 kD; Observed band size: 25 kD)

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