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# Anti-RAB39A Antibody

Catalog # AP53771

## Product Information

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

## Additional Information

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| **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

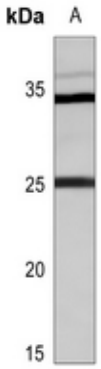
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|---|---|
| **Name** | RAB39A ( HGNC:16521) |
| **Synonyms** | RAB39 |
| **Function** | The small GTPases Rab are key regulators of intracellular membrane trafficking, from the formation of transport vesicles to their fusion with membranes (PubMed:21255211). 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). Primarily localized on lysosomes under basal conditions (PubMed:37821429). Primarily 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'.