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RAB39 antibody - N-terminal region

Rabbit Polyclonal Antibody
Catalog # AI14040

Product Information

Application	WB
Primary Accession	Q8BHD0
Other Accession	NM_017516, NP_059986
Reactivity	Human, Mouse, Rat, Rabbit, Pig, Guinea Pig, Horse, Bovine
Predicted	Mouse, Rat, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	24978

Additional Information

Gene ID	270160
Alias Symbol	RAB39
Other Names	Ras-related protein Rab-39A, Rab-39, Rab39a, Rab39
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-RAB39 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	RAB39 antibody - N-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	Rab39a {ECO:0000312|MGI:MGI:2442855}
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. 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). 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 (By similarity). Also negatively regulates lipopolysaccharide (LPS)-induced autophagosome formation in macrophages, possibly by implicating PI3K (By similarity). 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 (PubMed:31821587). Plays a role in the maturation and acidification of phagosomes that engulf pathogens, such as S.aureus and M.tuberculosis. Plays a role in the fusion of phagosomes with lysosomes (By similarity). May be involved in multiple neurite formation (PubMed:23624502).

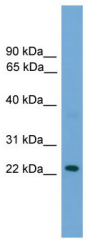
Cellular Location

Cell membrane; Lipid-anchor; Cytoplasmic side. Cytoplasmic vesicle, phagosome membrane; Lipid-anchor; Cytoplasmic side. Late endosome membrane. Lysosome membrane {ECO:0000250|UniProtKB:Q14964}. Autolysosome membrane {ECO:0000250|UniProtKB:Q14964}. Note=Recruited to phagosomes containing S.aureus or Mycobacterium. Primarily localized on lysosomes under basal conditions (By similarity). Primarily localized on autophagosomes/autolysosomes under autophagy-induced conditions (By similarity). Colocalized with VPS39 and VPS41 on lysosomes or autolysosomes (By similarity). Colocalized with STX17 on autolysosomes in autophagy-induced conditions (By similarity). Localized (GTP-bound) to phagosomes in dendritic cells; shuttles vesicles from the ER-Golgi to the phagosome (PubMed:31821587). {ECO:0000250|UniProtKB:Q14964, ECO:0000269|PubMed:31821587}

References

Carninci P.,et al.Science 309:1559-1563(2005).

Images



WB Suggested Anti-RAB39 Antibody Titration: 0.2-1 µg/ml
ELISA Titer: 1:312500
Positive Control: Hela cell lysate

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