

Anti-RAB34 Antibody

Catalog # AP53316

Product Information

Application	WB, IHC
Primary Accession	Q9BZG1
Reactivity	Human, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	29044

Additional Information

Gene ID	83871
Other Names	RAB39; RAH; Ras-related protein Rab-34; Ras-related protein Rab-39; Ras-related protein Rah
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human RAB34. The exact sequence is proprietary.
Dilution	WB~~ 1:1000 IHC~~1:100~500
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	RAB34 (HGNC:16519)
Synonyms	RAB39, RAH
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). RAB34 transports protein involved in the redistribution of lysosomes to the peri-Golgi region (PubMed:27113757). Plays a role in the maturation 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). Involved in ciliogenesis (PubMed:37384395). In particular, it is required for early steps of the intracellular cilium assembly pathway initiated by trafficking and docking of ciliary vesicles to the centrioles in the cytoplasm, followed by axoneme

formation in the cytoplasm. After axoneme elongation, the centrioles migrate close to the cell surface so that ciliary vesicles can fuse with the plasma membrane to expose cilia to the extracellular space (By similarity). It seems dispensable for ciliogenesis via the extracellular pathway where cilium assembly begins after migration and docking of the centriole to the plasma membrane (By similarity). Also acts as a positive regulator of hedgehog signaling and regulates ciliary function (By similarity).

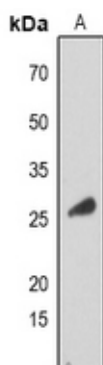
Cellular Location

Cytoplasm {ECO:0000250|UniProtKB:Q64008}. Golgi apparatus {ECO:0000250|UniProtKB:Q64008}. Cytoplasmic vesicle, phagosome. Cytoplasmic vesicle, phagosome membrane; Lipid-anchor; Cytoplasmic side. Cell projection, cilium {ECO:0000250|UniProtKB:Q64008}. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome {ECO:0000250|UniProtKB:Q64008} Cytoplasm, cytoskeleton, microtubule organizing center, centrosome, centriole. Note=Recruited to phagosomes containing *S.aureus* or *M.tuberculosis* (PubMed:21255211)

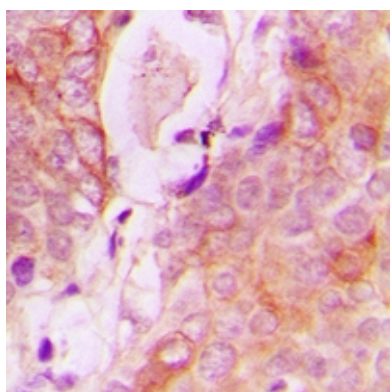
References

Hong W.,et al.Submitted (NOV-2000) to the EMBL/GenBank/DDBJ databases.
 Stanchi F.,et al.Submitted (MAR-2000) to the EMBL/GenBank/DDBJ databases.
 Kalnine N.,et al.Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases.
 Ota T.,et al.Nat. Genet. 36:40-45(2004).
 Zody M.C.,et al.Nature 440:1045-1049(2006).

Images



Western blot analysis of RAB34 expression in rat muscle (A) whole cell lysates. (Predicted band size: 29 kD; Observed band size: 29 kD)



Immunohistochemical analysis of RAB34 staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.