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# RAB34 Rabbit pAb

Catalog # AP99237

## Product Information

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| **Application** | IHC-P, IHC-F, IF, E |
| **Primary Accession** | Q9BZG1 |
| **Other Accession** | Q9BZG1 |
| **Predicted** | Rat, Human, Mouse |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Calculated MW** | 29044 |
| **Physical State** | Liquid |
| **Immunogen** | KLH conjugated synthetic peptide derived from human RAB34 |
| **Epitope Specificity** | 121-220/259 |
| **Isotype** | IgG |
| **Purity** | affinity purified by Protein A |
| **Buffer** | 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. |
| **SIMILARITY** | Belongs to the small GTPase superfamily. Rab family. |
| **Important Note** | This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications. |
| **Background Descriptions** | This gene encodes a protein belonging to the RAB family of proteins, which are small GTPases involved in protein transport. This family member is a Golgi-bound member of the secretory pathway that is involved in the repositioning of lysosomes and the activation of macropinocytosis. Alternative splicing of this gene results in multiple transcript variants. This gene overlaps and shares exon structure with the nine-amino acid residue-repeats (NARR) gene, which encodes a functionally distinct nucleolar protein from a different reading frame. [provided by RefSeq, Jan 2012] |

## Additional Information

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| **Gene ID** | 83871 |
| **Other Names** | NARR; OFD20; RAB39; RAH; Rah1; RAB34_HUMAN; RAB34; Ras-related protein Rab-39; Ras-related protein Rah; 3.6.5.2; RAB34_MOUSE; Ras-related homolog; RAB34_RAT; RAB34, member RAS oncogene family; nine-amino acid residue-repeats |
| **Dilution** | IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:5000-10000 |
| **Storage** | Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C. |

## Protein Information

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| **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) |

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