

Rab9 Antibody

Rabbit mAb Catalog # AP90516

Product Information

Application	WB, IF, ICC
Primary Accession	<u>P51151</u>
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Other Names	RAB9A; DmRab9; Ras related protein Rab 9A;
lsotype	Rabbit IgG
Host	Rabbit
Calculated MW	22838

Additional Information

Dilution Purification	WB 1:500~1:2000 ICC/IF 1:50~1:200 Affinity-chromatography
Immunogen	A synthesized peptide derived from human Rab9
Description	Involved in the transport of proteins between the endosomes and the trans Golgi network. Interacts (preferentially in its GTP-bound form) with GCC2 (via its GRIP domain).
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

Protein Information

Name	RAB9A (<u>HGNC:9792</u>)
Synonyms	RAB9
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). RAB9A is involved in the transport of proteins between the endosomes and the trans-Golgi network (TGN) (PubMed: <u>34793709</u>). Specifically uses NDE1/NDEL1 as an effector to interact with the dynein motor complex in order to control retrograde trafficking of RAB9-associated late endosomes to the TGN (PubMed: <u>34793709</u>). Involved in the recruitment of SGSM2 to melanosomes and is required for the proper trafficking of melanogenic enzymes TYR, TYRP1 and DCT/TYRP2 to melanosomes in melanocytes (By similarity).

Cell membrane; Lipid-anchor; Cytoplasmic side. Endoplasmic reticulum membrane. Golgi apparatus membrane. Late endosome. Cytoplasmic vesicle, phagosome membrane; Lipid-anchor; Cytoplasmic side. Cytoplasmic vesicle, phagosome. Cytoplasmic vesicle membrane. Melanosome {ECO:0000250|UniProtKB:Q9R0M6}. Note=Colocalizes with OSBPL1A at the late endosome (PubMed:16176980). Recruited to phagosomes containing S.aureus or M.tuberculosis (PubMed:21255211). Mainly localizes to late endosomes and partially localizes to Golgi (PubMed:34793709) Colocalizes with NDE1 to membrane vesicles (PubMed:34793709)

Images



Western blot analysis of Rab9 expression in HepG2 cell lysate.

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