10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-Rab9 Picoband Antibody

Catalog # ABO12570

Product Information

Application	WB
Primary Accession	P51151
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Ras-related protein Rab-9A(RAB9A) detection. Tested with WB in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	9367
Other Names	Ras-related protein Rab-9A, RAB9A, RAB9
Calculated MW	22838
Application Details	Western blot, 0.1-0.5 □g/ml, Human, Mouse, Rat
Subcellular Localization	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. Colocalizes with OSBPL1A at the late endosome. Recruited to phagosomes containing S.aureus or M.tuberculosis.
Source	Eukaryota
Protein Name	Ras-related protein Rab-9A
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human Rab9 (156-193aa KDATNVAAAFEEAVRRVLATEDRSDHLIQTDTVNLHRK), different from the related mouse sequence by three amino acids, and from the related rat sequence by two amino acids.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins.
Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also

be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.

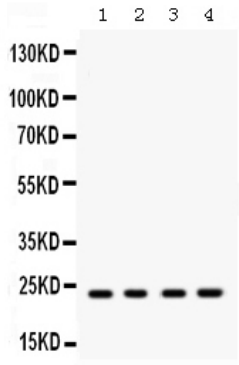
Protein Information

Name	RAB9A (HGNC:9792)
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:34793709). 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:34793709). 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).
Cellular Location	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)

Background

Ras-related protein Rab-9A, also called RAB9, is a protein that in humans is encoded by the RAB9A gene. This gene is mapped to Xp22.2. RAB9 has been localized to components of the endocytic/exocytic pathway and has been implicated in recycling of membrane receptors. It has been found that downregulation of RAB9A gene expression in HeLa cells induced severe cell vacuolation. RAB9A GTPase is directly bound by TIP47 in its active, GTP-bound conformation. Moreover, RAB9A increases the affinity of TIP47 for its cargo.
What â€™s more, this gene may involved in the transport of proteins between the endosomes and the trans Golgi network. RAB9A has been shown to interact with RABEPK and TIP47.

Images



Western blot analysis of Rab9 expression in rat brain extract (lane 1), mouse brain extract (lane 2), HELA whole cell lysates (lane 3) and MCF-7 whole cell lysates (lane 4). Rab9 at 23KD was detected using rabbit anti- Rab9 Antigen Affinity purified polyclonal antibody (Catalog # ABO12570) at0.5 ??g/mL. The blot was developed using chemiluminescence (ECL) method .

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