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KD-Validated Anti-Rab9 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI1007

Specification

KD-Validated Anti-Rab9 Rabbit Monoclonal Antibody - Product Information

Application	**WB, FC, ICC**
Primary Accession	P51151
Reactivity	**Rat, Human, Mouse**
Clonality	**Monoclonal**
Isotype	**Rabbit IgG**
Calculated MW	**Predicted, 23 kDa, observed, 23 kDa KDa**
Gene Name	**RAB9A**
Aliases	**RAB9A; RAB9A, Member RAS Oncogene Family; RAB9; RAB9, Member RAS Oncogene Family; Ras-Related Protein Rab-9A**
Immunogen	**A synthesized peptide derived from human Rab9A**

KD-Validated Anti-Rab9 Rabbit Monoclonal Antibody - Additional Information

Gene ID **9367**

Other Names
Ras-related protein Rab-9A, 3.6.5.2, RAB9A (HGNC:9792), RAB9

KD-Validated Anti-Rab9 Rabbit Monoclonal Antibody - 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).

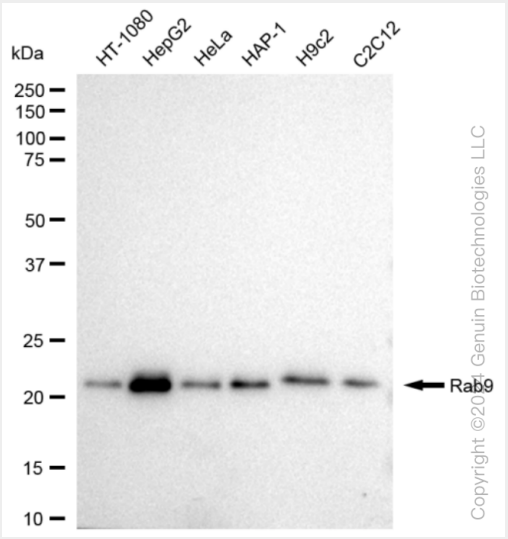
Cellular Location
Cell membrane; Lipid-anchor; Cytoplasmic side. Endoplasmic reticulum membrane. Golgi apparatus membrane. Late endosome. Cytoplasmic vesicle, phagosome membrane; Lipid-anchor; Cytoplasmic side. Cytoplasmic vesicle, phagosome. Cytoplasmic vesicle membrane. Melanosome {ECO:0000250|UniProtKB:Q9R0M6}. 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)

KD-Validated Anti-Rab9 Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KD-Validated Anti-Rab9 Rabbit Monoclonal Antibody - Images



Western blotting analysis using anti-Rab9 antibody (Cat#AGI1007). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-Rab9 antibody (Cat#AGI1007, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.

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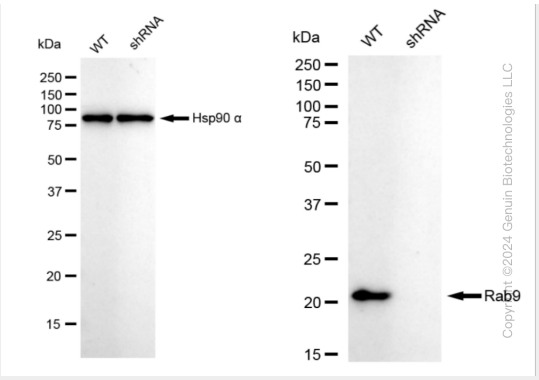
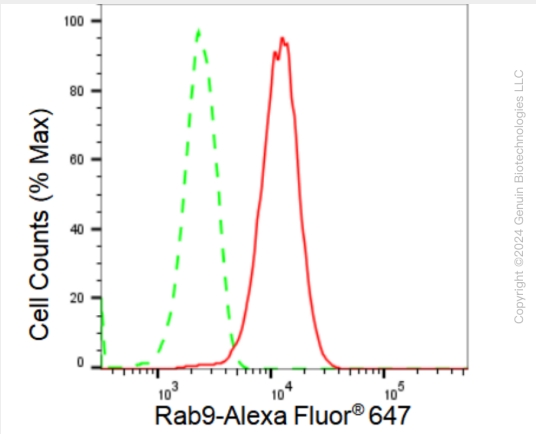
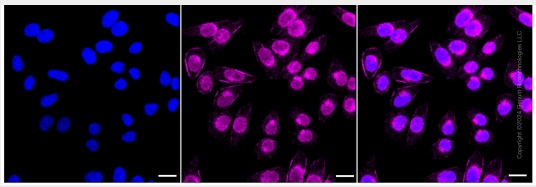


Western blotting analysis using anti-Rab9 antibody (Cat#AGI1007). Rab9 expression in wild type (WT) and Rab9 shRNA knockdown (KD) Hela cells with 30 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with anti-Rab9 antibody (Cat#AGI1007, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of Rab9 expression in HepG2 cells using Rab9 antibody (Cat#AGI1007, 1:2,000). Green, isotype control; red, Rab9.



Immunocytochemical staining of HepG2 cells with Rab9 antibody (Cat#AGI1007, 1:1,000). Nuclei were stained blue with DAPI; Rab9 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 µm.