

Rab 9A (Mab9): sc-53145

BACKGROUND

The Ras-related superfamily of guanine nucleotide binding proteins includes the R-Ras, Rap, Ral/Rec and Rho/Rab subfamilies, all of which are thought to play an important role in either endocytosis or in biosynthetic protein transport. The process of transporting newly synthesized proteins from the endoplasmic reticulum (ER) to various stacks of the Golgi complex, and to secretory vesicles, involves the movement of carrier vesicles and requires Rab protein function. Rab proteins are also an integral part of endocytic pathways. Rab 9A is a 201 amino acid protein that localizes to the cytoplasmic side of the cell membrane, as well as to the membrane of the Golgi apparatus and the ER, and is involved in the transport of proteins between endosomes and the *trans*-Golgi network.

CHROMOSOMAL LOCATION

Genetic locus: RAB9A (human) mapping to Xp22.2; Rab9 (mouse) mapping to X F5.

SOURCE

Rab 9A (Mab9) is a mouse monoclonal antibody raised against full length Rab 9 of canine origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Rab 9A (Mab9) is available conjugated to agarose (sc-53145 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-53145 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-53145 PE), fluorescein (sc-53145 FITC), Alexa Fluor[®] 488 (sc-53145 AF488), Alexa Fluor[®] 546 (sc-53145 AF546), Alexa Fluor[®] 594 (sc-53145 AF594) or Alexa Fluor[®] 647 (sc-53145 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-53145 AF680) or Alexa Fluor[®] 790 (sc-53145 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

Rab 9A (Mab9) is recommended for detection of prenylated and non-prenylated Rab 9 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other Rab family members.

Rab 9A (Mab9) is also recommended for detection of prenylated and non-prenylated Rab 9 in additional species, including bovine, feline and canine.

Suitable for use as control antibody for Rab 9A siRNA (h): sc-41830, Rab 9A siRNA (m): sc-41831, Rab 9A shRNA Plasmid (h): sc-41830-SH, Rab 9A shRNA Plasmid (m): sc-41831-SH, Rab 9A shRNA (h) Lentiviral Particles: sc-41830-V and Rab 9A shRNA (m) Lentiviral Particles: sc-41831-V.

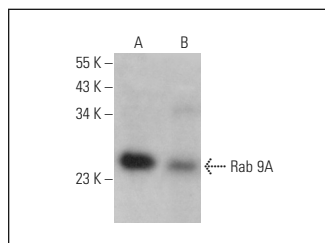
Molecular Weight of Rab 9A: 23 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

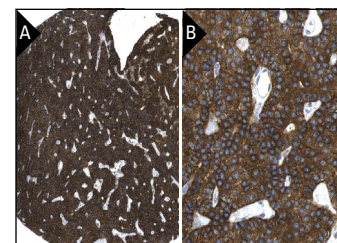
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



Rab 9A (Mab9): sc-53145. Western blot analysis of Rab 9A expression in HeLa (A) and MCF7 (B) whole cell lysates.



Rab 9A (Mab9): sc-53145. Immunoperoxidase staining of formalin fixed, paraffin-embedded human parathyroid gland tissue showing cytoplasmic staining of glandular cells at low (A) and high (B) magnification. Kindly provided by The Swedish Human Protein Atlas (HPA) program.

SELECT PRODUCT CITATIONS

- Chevalier, S.A., et al. 2012. The transcription profile of Tax-3 is more similar to Tax-1 than Tax-2: insights into HTLV-3 potential leukemogenic properties. *PLoS ONE* 7: e41003.
- Sharoar, M.G., et al. 2021. Accumulation of saposin in dystrophic neurites is linked to impaired lysosomal functions in Alzheimer's disease brains. *Mol. Neurodegener.* 16: 45.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

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