

Rab 3/16 (G-1): sc-271044

BACKGROUND

The Ras-related superfamily of guanine nucleotide binding proteins, which includes the R-Ras, Rap, Ral/Rec and Rho/Rab superfamilies exhibit 30-60% homology with Ras p21. Accumulating data suggests an important role for Rab proteins, either in endocytosis or in biosynthetic protein transport. The transport of newly synthesized proteins from the endoplasmic reticulum to various stacks of the Golgi complex and to secretory vesicles involves at each stage the movement of carrier vesicles, a process that appears to involve Rab protein function. The possibility that Rab proteins might also direct the exocytosis from secretory vesicles to the plasma membrane is supported by the observation that in yeast, the SEC4 protein, which is 40% homologous to Rab proteins, is associated with secretory vesicles. At least eight members of the Rab family have been identified, each of which is found at a particular stage of a membrane transport pathway.

REFERENCES

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SOURCE

Rab 3/16 (G-1) is a mouse monoclonal antibody raised against amino acids 1-220 representing full length Rab 3A of human origin.

STORAGE

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

PROTOCOLS

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

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Rab 3/16 (G-1) is available conjugated to agarose (sc-271044 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-271044 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-271044 PE), fluorescein (sc-271044 FITC), Alexa Fluor[®] 488 (sc-271044 AF488), Alexa Fluor[®] 546 (sc-271044 AF546), Alexa Fluor[®] 594 (sc-271044 AF594) or Alexa Fluor[®] 647 (sc-271044 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-271044 AF680) or Alexa Fluor[®] 790 (sc-271044 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

Rab 3/16 (G-1) is recommended for detection of Rab 3A, Rab 3B, Rab 3C, Rab 3D and Rab 16 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); partially cross reactive with other Rab family members.

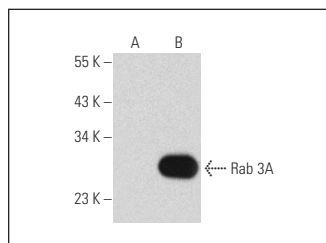
Molecular Weight of Rab 3/16: 24 kDa.

Positive Controls: Rab 3A (m): 293T Lysate: sc-122905.

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.

DATA



Rab 3/16 (G-1): sc-271044. Western blot analysis of Rab 3A expression in non-transfected: sc-117752 (A) and mouse Rab 3A transfected: sc-122905 (B) 293T whole cell lysates.

RESEARCH USE

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