

Rab 4B (C-17): sc-26565

BACKGROUND

The Ras-related superfamily of guanine nucleotide binding proteins, which includes the R-Ras, Rap, Ral/Rec and Rho/Rab superfamilies, exhibits 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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2. Chavrier, P., et al. 1992. The complexity of the Rab and Rho GTP-binding protein subfamilies revealed by a PCR cloning approach. *Gene* 112: 261-264.
3. Baldini, G., et al. 1992. Cloning of a Rab 3 isotype predominately expressed in adipocytes. *Proc. Natl. Acad. Sci. USA* 89: 5049-5052.
4. Takizawa, P. et al. 1993. Coatomers and SNAREs in promoting membrane traffic. *Cell* 75: 593-596.
5. Novick, P., et al. 1993. Friends and family: the role of the Rab GTPases in vesicular traffic. *Cell* 75: 597-601.
6. Ferro-Novick, S., et al. 1993. The role of GTP-binding proteins in transport along the exocytic pathway. *Annu. Rev. Cell Biol.* 9: 575-599.

CHROMOSOMAL LOCATION

Genetic locus: RAB4B (human) mapping to 19q13.2; Rab4b (mouse) mapping to 7 A3.

SOURCE

Rab 4B (C-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Rab 4B of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-26565 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

Rab 4B (C-17) is recommended for detection of Rab 4B of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

Rab 4B (C-17) is also recommended for detection of Rab 4B in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Rab 4B siRNA (h): sc-106471, Rab 4B siRNA (m): sc-152667, Rab 4B shRNA Plasmid (h): sc-106471-SH, Rab 4B shRNA Plasmid (m): sc-152667-SH, Rab 4B shRNA (h) Lentiviral Particles: sc-106471-V and Rab 4B shRNA (m) Lentiviral Particles: sc-152667-V.

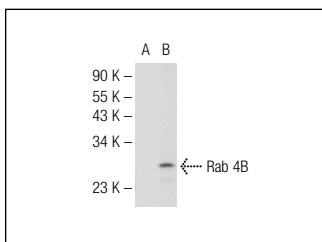
Molecular Weight of Rab 4B isoforms: 24/28 kDa.

Positive Controls: Rab 4B (h): 293T Lysate: sc-177818.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Rab 4B (C-17): sc-26565. Western blot analysis of Rab 4B expression in non-transfected: sc-117752 (A) and human Rab 4B transfected: sc-177818 (B) 293T whole cell lysates.

RESEARCH USE

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

MONOS
Satisfaction
Guaranteed

Try **Rab 4B (C-3): sc-271982** or **Rab 4B (H-3): sc-376386**, our highly recommended monoclonal alternatives to Rab 4B (C-17).