

Rab 7 (m): 293T Lysate: sc-122913

BACKGROUND

The Ras-related superfamily of guanine nucleotide binding proteins, which includes the Ral/Rec, Rap, R-Ras and Rho/Rab subfamilies, 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. Several members of the Rab subfamily have been identified, each of which is found at a particular stage of a membrane transport pathway.

REFERENCES

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3. Karniguian, A., Zahroui, A. and Tavitian, A. 1993. Identification of small GTP-binding Rab proteins in human platelets: Thrombin-induced phosphorylation of Rab 3B, Rab 6, and Rab 8 proteins. *Proc. Natl. Acad. Sci. USA* 90: 7647-7651.
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6. Soldati, T., Rancano, C., Geissler, H. and Pfeffer, S.R. 1995. Rab 7 and Rab 9 are recruited onto late endosomes by biochemically distinguishable processes. *J. Biol. Chem.* 270: 25541-25548.
7. Goldenring, J.R., Smith, J., Vaughan, J.D., Cameron, P., Hawkins, W. and Navarre, J. 1996. Rab 11 is an apically located small GTP-binding protein in epithelial tissues. *Am. J. Physiol.* 270: G515-G525.

CHROMOSOMAL LOCATION

Genetic locus: Rab7 (mouse) mapping to 6 D1.

PRODUCT

Rab 7 (m): 293T Lysate represents a lysate of mouse Rab 7 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

APPLICATIONS

Recommended use: 10-20 µl per lane. mouse reactive Rab 7 antibodies.
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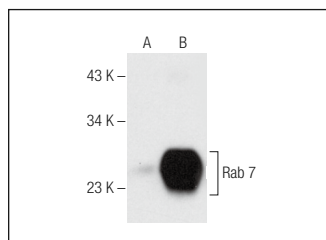
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Rab 7 (B-3): sc-376362 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse Rab 7 expression in Rab 7 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

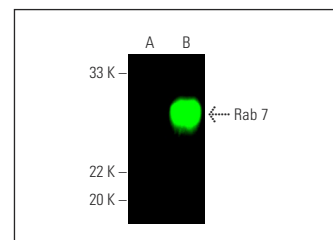
RECOMMENDED SUPPORT REAGENTS

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.

DATA



Rab 7 (B-3): sc-376362. Western blot analysis of Rab 7 expression in non-transfected: sc-117752 (A) and mouse Rab 7 transfected: sc-122913 (B) 293T whole cell lysates.



Rab 7 (D-4) Alexa Fluor® 680: sc-271608 AF680. Direct near-infrared western blot analysis of Rab 7 expression in non-transfected: sc-117752 (A) and mouse Rab 7 transfected: sc-122913 (B) 293T whole cell lysates. Blocked with UltraCruz® Blocking Reagent: sc-516214.

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.