

Rab 24 (m): 293T Lysate: sc-122886

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. Rab 24 differs from other Rab family members because it has low intrinsic GTPase activity and is not efficiently prenylated. Rab 24 is thought to be involved in the autophagic 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. Novick, P. and Brennwald, P. 1993. Friends and family: the role of the Rab GTPases in vesicular traffic. *Cell* 75: 597-601.
4. Erdman, R.A., et al. 2000. Rab 24 is an atypical member of the Rab GTPase family. Deficient GTPase activity, GDP dissociation inhibitor interaction, and prenylation of Rab 24 expressed in cultured cells. *J. Biol. Chem.* 275: 3848-3856.
5. Maltese, W.A., et al. 2002. Mutant Rab 24 GTPase is targeted to nuclear inclusions. *BMC Cell Biol.* 3: 25.
6. Munafó, D.B. and Colombo, M.I. 2002. Induction of autophagy causes dramatic changes in the subcellular distribution of GFP-Rab 24. *Traffic* 3: 472-482.
7. Ding, J., et al. 2003. Tyrosine phosphorylation of the Rab 24 GTPase in cultured mammalian cells. *Biochem. Biophys. Res. Commun.* 312: 670-675.

CHROMOSOMAL LOCATION

Genetic locus: Rab24 (mouse) mapping to 13 B1.

PRODUCT

Rab 24 (m): 293T Lysate represents a lysate of mouse Rab 24 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.

PROTOCOLS

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

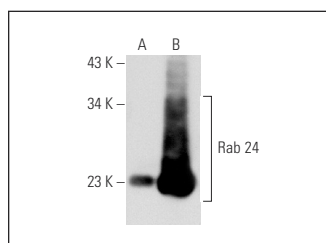
APPLICATIONS

Rab 24 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive Rab 24 antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Rab 24 (43): sc-136049 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse Rab 24 expression in Rab 24 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

DATA



Rab 24 (43): sc-136049. Western blot analysis of Rab 24 expression in non-transfected: sc-117752 (A) and mouse Rab 24 transfected: sc-122886 (B) 293T whole cell lysates.

RESEARCH USE

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