

Rab 25 (h): 293T Lysate: sc-114009

BACKGROUND

The Ras-related superfamily of guanine nucleotide binding proteins includes the R-Ras, Rap, Ral/Rec and Rho/Rab subfamilies. Increasing data suggests an important role for Rab proteins in either endocytosis or in biosynthetic protein transport. The process of transporting newly synthesized proteins from the endoplasmic reticulum 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 25, also known as CATX-8 or Rab 11C, is a member of the Rab family of proteins that is exclusively expressed in epithelial cells and participates in apical vesicle trafficking. Rab 25 is overexpressed in ovarian and breast cancer cells and has been associated with metastasis and tumor aggressiveness. The forced expression of Rab 25 in ovarian and breast cancer cells increases cell proliferation *in vivo*.

REFERENCES

1. 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.
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3. Chen, Y., et al. 1993. Expression and localization of two low molecular weight GTP-binding proteins, Rab 8 and Rab 10, by epitope tag. *Proc. Natl. Acad. Sci. USA* 90: 6508-6512.
4. Karniguian, A., et al. 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.
5. Novick, P. and Brennwald, P. 1993. Friends and family: the role of the Rab GTPases in vesicular traffic. *Cell* 75: 597-601.
6. Feng, Y., et al. 1995. Rab 7: an important regulator of late endocytic membrane traffic. *J. Cell Biol.* 131: 1435-1452.
7. Soldati, T., et al. 1995. Rab 7 and Rab 9 are recruited onto late endosomes by biochemically distinguishable processes. *J. Biol. Chem.* 270: 25541-25548.

CHROMOSOMAL LOCATION

Genetic locus: RAB25 (human) mapping to 1q22.

PRODUCT

Rab 25 (h): 293T Lysate represents a lysate of human Rab 25 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

Rab 25 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive Rab 25 antibodies. Recommended use: 10-20 µl per lane.

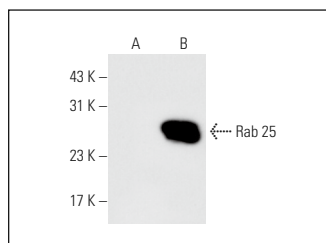
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Rab 25 (E-7): sc-166143 is recommended as a positive control antibody for Western Blot analysis of enhanced human Rab 25 expression in Rab 25 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

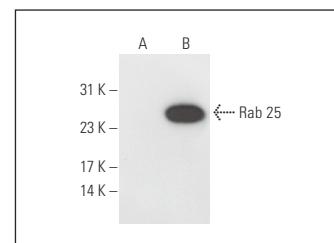
RECOMMENDED SUPPORT REAGENTS

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 25 (E-7): sc-166143. Western blot analysis of Rab 25 expression in non-transfected: sc-117752 (A) and human Rab 25 transfected: sc-114009 (B) 293T whole cell lysates.



Rab 25 (D-3): sc-166204. Western blot analysis of Rab 25 expression in non-transfected: sc-117752 (A) and human Rab 25 transfected: sc-114009 (B) 293T whole cell lysates.

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.

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.