

Rab 19 (S-14): sc-68764

BACKGROUND

The Ras-related superfamily of guanine nucleotide binding proteins includes the R-Ras, Rap, Ral/Rec and Rho/Rab subfamilies, all of which are thought to play an important role in either endocytosis or in biosynthetic protein transport. The process of transporting newly synthesized proteins from the endoplasmic reticulum (ER) 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 19 is a 217 amino acid protein that is lipid anchored to the cytoplasmic side of the cell membrane and, as a member of the small GTPase superfamily, may play a role in endocytotic pathways. Multiple isoforms of Rab 19 exist due to alternative splicing events.

REFERENCES

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2. Chen, D., Guo, J. and Gahl, W.A. 1997. RAB GTPases expressed in human melanoma cells. *Biochim. Biophys. Acta* 1355: 1-6.
3. Zhao, H., Ettala, O. and Väänänen, H.K. 2002. Intracellular membrane trafficking pathways in bone-resorbing osteoclasts revealed by cloning and subcellular localization studies of small GTP-binding rab proteins. *Biochem. Biophys. Res. Commun.* 293: 1060-1065.
4. Ali, B.R., Wasmeier, C., Lamoreux, L., Strom, M. and Seabra, M.C. 2004. Multiple regions contribute to membrane targeting of Rab GTPases. *J. Cell Sci.* 117: 6401-6412.
5. Chakrabarty, K. and Heumann, R. 2008. Prospective of Ras signaling in stem cells. *Biol. Chem.* 389: 791-798.
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CHROMOSOMAL LOCATION

Genetic locus: RAB19 (human) mapping to 7q34; Rab19 (mouse) mapping to 6 B1.

SOURCE

Rab 19 (S-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Rab 19 of mouse 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-68764 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 19 (S-14) is recommended for detection of Rab 19 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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).

Suitable for use as control antibody for Rab 19 siRNA (h): sc-76318, Rab 19 siRNA (m): sc-76319, Rab 19 shRNA Plasmid (h): sc-76318-SH, Rab 19 shRNA Plasmid (m): sc-76319-SH, Rab 19 shRNA (h) Lentiviral Particles: sc-76318-V and Rab 19 shRNA (m) Lentiviral Particles: sc-76319-V.

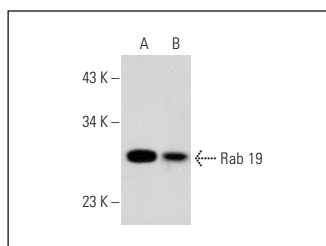
Molecular Weight of Rab 19: 24 kDa.

Positive Controls: mouse kidney extract: sc-2255 or mouse lung extract: sc-2390.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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 19 (S-14): sc-68764. Western blot analysis of Rab 19 expression in mouse lung (A) and mouse kidney (B) tissue extracts.

RESEARCH USE

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

PROTOCOLS

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