

Rab 10 (2A1C9): sc-101429

BACKGROUND

The Ras-related superfamily of guanine nucleotide binding proteins, which includes the R-Ras, Rap, Ral/Rec 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. At least eight 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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CHROMOSOMAL LOCATION

Genetic locus: RAB10 (human) mapping to 2p23.3; Rab10 (mouse) mapping to 12 A1.1.

SOURCE

Rab 10 (2A1C9) is a mouse monoclonal antibody raised against a recombinant protein corresponding to amino acids 1-198 of Rab 10 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Rab 10 (2A1C9) is recommended for detection of Rab 10 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Rab 10 siRNA (h): sc-41832, Rab 10 siRNA (m): sc-41833, Rab 10 shRNA Plasmid (h): sc-41832-SH, Rab 10 shRNA Plasmid (m): sc-41833-SH, Rab 10 shRNA (h) Lentiviral Particles: sc-41832-V and Rab 10 shRNA (m) Lentiviral Particles: sc-41833-V.

Molecular Weight of Rab 10: 23 kDa.

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.

SELECT PRODUCT CITATIONS

- Jung, S.R., et al. 2021. Lithium enhances exercise-induced glycogen breakdown and Insulin-induced AKT activation to facilitate glucose uptake in rodent skeletal muscle. *Pflugers Arch.* 473: 673-682.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. 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.