

Rab 40A/B/C (H-149): sc-99117

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 40A, Rab 40B and Rab 40C each contain one SOCS box domain and are members of the Rab subfamily of GTPases. Localized to the cytoplasmic side of the cell membrane, Rab 40A, Rab 40B and Rab 40C are thought to function as substrate-recognition components of a SCF-like ECS (Elongin-Cullin-SOCS-box protein) E3 ubiquitin ligase complex that functions to mediate the degradation of target proteins.

REFERENCES

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3. Kile, B.T., Schulman, B.A., Alexander, W.S., Nicola, N.A., Martin, H.M. and Hilton, D.J. 2002. The SOCS box: a tale of destruction and degradation. *Trends Biochem. Sci.* 27: 235-241.
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SOURCE

Rab 40A/B/C (H-149) is a rabbit polyclonal antibody raised against amino acids 1-149 mapping at the N-terminus of Rab 40C of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

RESEARCH USE

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

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

Rab 40A/B/C (H-149) is recommended for detection of Rab 40A of human origin and Rab 40B and Rab 40C 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).

Rab 40A/B/C (H-149) is also recommended for detection of Rab 40A of human origin and Rab 40B and Rab 40C in additional species, including bovine and avian.

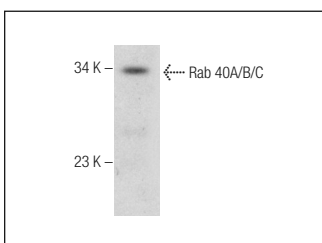
Molecular Weight of Rab 40A/B/C: 31 kDa.

Positive Controls: mouse brain extract: sc-2253.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Rab 40A/B/C (H-149): sc-99117. Western blot analysis of Rab 40A/B/C expression in mouse brain tissue extract.

PROTOCOLS

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

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Try **Rab 40C (H-8): sc-514826**, our highly recommended monoclonal alternative to Rab 40A/B/C (H-149).