

Rab 43 (V-17): sc-100114

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 43, also known as ISY1, Rab 41 or Rab 11B, is a widely expressed member of the Rab family of proteins. Localizing to the Golgi complex, Rab 43 is required for retrograde trafficking to the *trans*-Golgi and for the biogenesis and maintenance of the Golgi structure. In addition, Rab 43 is a target of the GTPase activating protein (GAP) RN-tre.

REFERENCES

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- Haas, A.K., et al. 2005. A GTPase-activating protein controls Rab5 function in endocytic trafficking. Nat. Cell Biol. 7: 887-893.
- Sklan, E.H., et al. 2007. TBC1D20 is a Rab1 GTPase-activating protein that mediates hepatitis C virus replication. J. Biol. Chem. 282: 36354-36361.
- Fuchs, E., et al. 2007. Specific Rab GTPase-activating proteins define the Shiga toxin and epidermal growth factor uptake pathways. J. Cell Biol. 177: 1133-1143.
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CHROMOSOMAL LOCATION

Genetic locus: RAB43 (human) mapping to 3q21.3; Rab43 (mouse) mapping to 6 D1.

SOURCE

Rab 43 (V-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Rab 43 of human origin.

STORAGE

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

PROTOCOLS

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

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-100114 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Rab 43 (V-17) is recommended for detection of Rab 43 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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); non cross-reactive with other Rab family members.

Suitable for use as control antibody for Rab 43 siRNA (h): sc-78238, Rab 43 siRNA (m): sc-152648, Rab 43 shRNA Plasmid (h): sc-78238-SH, Rab 43 shRNA Plasmid (m): sc-152648-SH, Rab 43 shRNA (h) Lentiviral Particles: sc-78238-V and Rab 43 shRNA (m) Lentiviral Particles: sc-152648-V.

Molecular Weight of Rab 43: 23 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227 or mouse testis extract: sc-2405.

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) 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.

RESEARCH USE

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