Rab 21 (A-14): sc-68766



The Power to Question

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 21 is a ubiquitously expressed member of the Rab family of proteins and localizes to the Golgi membrane, where it participates in endosomal trafficking of integrins. More specifically, Rab 21 associates with the cytoplasmic domains of Integrin α chains and is essential for integrin-mediated cell motility and cell adhesion. The overexpression of Rab 21 induces the endosomal traffic of integrins and promotes cell migration and cancer cell adhesion.

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CHROMOSOMAL LOCATION

Genetic locus: RAB21 (human) mapping to 12q21.1; Rab21 (mouse) mapping to 10 D2.

RESEARCH USE

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

SOURCE

Rab 21 (A-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Rab 21 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-68766 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Rab 21 (A-14) is recommended for detection of Rab 21 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).

Rab 21 (A-14) is also recommended for detection of Rab 21 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Rab 21 siRNA (h): sc-76322, Rab 21 siRNA (m): sc-76323, Rab 21 shRNA Plasmid (h): sc-76322-SH, Rab 21 shRNA Plasmid (m): sc-76323-SH, Rab 21 shRNA (h) Lentiviral Particles: sc-76322-V and Rab 21 shRNA (m) Lentiviral Particles: sc-76323-V.

Molecular Weight of Rab 21: 25 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

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.

STORAGE

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



Try **Rab 21 (B16K): sc-81917**, our highly recommended monoclonal alternative to Rab 21 (A-14).

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