SANTA CRUZ BIOTECHNOLOGY, INC.

Rab 13 (K-15): sc-30375

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The Ras-related superfamily of guanine nucleotide binding proteins, which includes the R-Ras, RAP, Ral/Rec and Rho/Rab superfamilies, exhibits 30-60% homology with Ras p21. Accumulating data suggests an important role for Rab proteins, either in endocytosis or in biosynthetic protein transport. The Rab family of small G proteins play an important role in determining the specificity of vesicular transport pathways. Rab 13 and Rab 3B localize to tight junctions in epithelial cells and to cytoplasmic vesicular structures in cells lacking tight junctions. Rab 13 can be detected in the junctional complex regions of a variety of epithelia, including intestine, kidney and liver.

REFERENCES

1. Novick, P., et al. 1993. Friends and family: the role of the Rab GTPases in vesicular traffic. Cell 75: 597-601.
2. Ferro-Novick, S., et al. 1993. The role of GTP-binding proteins in transport alomg the exocytic pathway. Annu. Rev. Cell Biol. 9: 575-599.

CHROMOSOMAL LOCATION

Genetic locus: RAB13 (human) mapping to 1q21.3; Rab13 (mouse) mapping to 3 F1.

SOURCE

Rab 13 (K-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Rab 13 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.

Blocking peptide available for competition studies, sc-30375 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

Rab 13 (K-15) is recommended for detection of Rab 13 of human and, to a lesser extent, mouse and rat 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 13 (K-15) is also recommended for detection of Rab 13 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Rab 13 siRNA (h): sc-44060, Rab 13 siRNA (m): sc-152627, Rab 13 shRNA Plasmid (h): sc-44060-SH, Rab 13 shRNA Plasmid (m): sc-152627-SH, Rab 13 shRNA (h) Lentiviral Particles: sc-44060-V and Rab 13 shRNA (m) Lentiviral Particles: sc-152627-V.

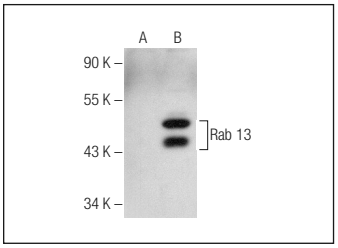
Molecular Weight of Rab 13: 25 kDa.

Positive Controls: Rab 13 (h): 293 Lysate: sc-129574.

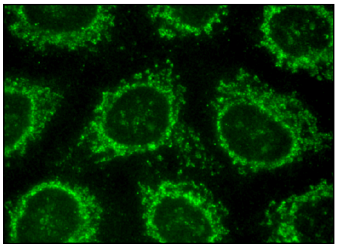
RECOMMENDED SECONDARY REAGENTS

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 13 (K-15): sc-30375. Western blot analysis of Rab 13 expression in non-transfected: sc-117752 (**A**) and human Rab 13 transfected: sc-129574 (**B**) 293T whole cell lysates.



Rab 13 (K-15): sc-30375. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic vesicles localization.

SELECT PRODUCT CITATIONS

1. Mruk, D.D., et al. 2009. Rab 13 participates in ectoplasmic specialization dynamics in the rat testis. Biol. Reprod. 80: 590-601.

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.