SANTA CRUZ BIOTECHNOLOGY, INC.

Rab11-FIP2 (K-16): sc-163273

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The Ras superfamily of GTPases can be subdivided into the Ras, Rho/Rac, Sar, Rab, Arf, Rap and Ran subfamilies, all of which control multiple aspects of cell function, including cytoskeletal rearrangement, nuclear signaling and cell growth. Members of the Ras protein superfamily are regulated by a variety of GTPase-interaction proteins that control GTPase function. Rab11-FIP2 (Rab11 family-interacting protein 2), also known as NRip11, is a 512 amino acid protein that localizes to both the cell membrane and the recycling endosome membrane and contains one C2 domain. Existing in a heterooligomeric complex with a variety of other proteins, Rab11-FIP2 functions as a Rab 11 effector protein that regulates the transport of vesicles from the endosomal recycling compartment (ERC) to the plasma membrane. Additionally, Rab11-FIP2 is thought to be involved in receptor-mediated endocytosis, as well as in membrane trafficking of recycling endosomes.

REFERENCES

1. Hales, C.M., et al. 2001. Identification and characterization of a family of Rab11-interacting proteins. J. Biol. Chem. 276: 39067-39075.
2. Lindsay, A.J. and McCaffrey, M.W. 2002. Rab11-FIP2 functions in transferrin recycling and associates with endosomal membranes via its COOH-terminal domain. J. Biol. Chem. 277: 27193-27199.
3. Junutula, J.R., et al. 2004. Molecular characterization of Rab11 interactions with members of the family of Rab11-interacting proteins. J. Biol. Chem. 279: 33430-33437.
4. Lindsay, A.J. and McCaffrey, M.W. 2004. The C2 domains of the class I Rab11 family of interacting proteins target recycling vesicles to the plasma membrane. J. Cell Sci. 117: 4365-4375.
5. Fan, G.H., et al. 2004. Rab11-family interacting protein 2 and myosin Vb are required for CXCR2 recycling and receptor-mediated chemotaxis. Mol. Biol. Cell 15: 2456-2469.
6. Naslavsky, N., et al. 2006. Interactions between EHD proteins and Rab11-FIP2: a role for EHD3 in early endosomal transport. Mol. Biol. Cell 17: 163-177.

CHROMOSOMAL LOCATION

Genetic locus: RAB11FIP2 (human) mapping to 10q26.11; Rab11fip2 (mouse) mapping to 19 D3.

SOURCE

Rab11-FIP2 (K-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Rab11-FIP2 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-163273 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Rab11-FIP2 (K-16) is recommended for detection of Rab11-FIP2 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), immunohistochemistry (including paraffin-embedded sections) (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 Rab11-FIP family members.

Rab11-FIP2 (K-16) is also recommended for detection of Rab11-FIP2 in additional species, including equine, canine, bovine and porcine.

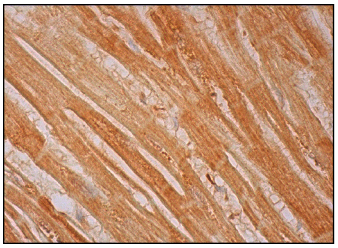
Suitable for use as control antibody for Rab11-FIP2 siRNA (h): sc-90683, Rab11-FIP2 siRNA (m): sc-152661, Rab11-FIP2 shRNA Plasmid (h): sc-90683-SH, Rab11-FIP2 shRNA Plasmid (m): sc-152661-SH, Rab11-FIP2 shRNA (h) Lentiviral Particles: sc-90683-V and Rab11-FIP2 shRNA (m) Lentiviral Particles: sc-152661-V.

Molecular Weight of Rab11-FIP2: 68 kDa.

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. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



Rab11-FIP2 (K-16): sc-163273. Immunoperoxidase staining of formalin fixed, paraffin-embedded human heart muscle tissue showing cytoplasmic staining of myocytes.

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.