SANTA CRUZ BIOTECHNOLOGY, INC.

Slac2-c (N-18): sc-66638

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The Power to Question

BACKGROUND

Slac2-c (Slp homolog lacking C2 domains c), also known as SLAC2C or MyRIP (Myosin-VIIa- and Rab-interacting protein) is a Rab effector protein that is expressed in a variety of tissues including brain, heart, skin and liver. Found in the basal microvilli of retinal pigment cells and in pre- and post-synaptic areas in photoreceptor cells, Slac2-c is involved in melanosome transport and functions to link Rab 27a with the actin-based motor proteins Myosin Va and Myosin VIIa. Once linked, the Myosins are able to transport Rab 27a to retinal melanosomes, thereby linking the actin cytoskeleton with the melanosome membrane. Slac2-c contains one FYVE-type zinc finger and one Rab-binding domain and is able to bind actin-like proteins through its conserved C-terminal region. Additionally, Slac2-c is thought to regulate the final steps of Insulin exocytosis by mediating the interaction of secretory granules with the cortical actin cytoskeleton.

REFERENCES

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3. Waselle, L., et al. 2003. Involvement of the Rab 27 binding protein Slac2-c/MyRIP in Insulin exocytosis. Mol. Biol. Cell 14: 4103-4113.
4. Kuroda, T.S., et al. 2005. Functional analysis of Slac2-c/MyRIP as a linker protein between melanosomes and Myosin VIIa. J. Biol. Chem. 280: 28015-28022.
5. Ivarsson, R., et al. 2005. Myosin Va controls Insulin granule recruitment during late-phase secretion. Traffic 6: 1027-1035.
6. Kuroda, T.S., et al. 2005. Identification and biochemical analysis of Slac2-c/MyRIP as a Rab 27a-, Myosin Va/VIIa-, and actin-binding protein. Methods Enzymol. 403: 431-444.
7. Klomp, A.E., et al. 2007. Analysis of the linkage of MyRIP and Myo7A to melanosomes by Rab 27a in retinal pigment epithelial cells. Cell Motil. Cytoskeleton 64: 474-487.
8. Lopes, V.S., et al. 2007. The ternary Rab 27a-MyRIP-Myosin VIIa complex regulates melanosome motility in the retinal pigment epithelium. Traffic 8: 486-499.
9. Goehring, A.S., et al. 2007. MyRIP anchors protein kinase A to the exocyst complex. J. Biol. Chem. 282: 33155-33167.

CHROMOSOMAL LOCATION

Genetic locus: MYRIP (human) mapping to 3p22.1; Myrip (mouse) mapping to 9 F4.

SOURCE

Slac2-c (N-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of Slac2-c 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-66638 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Slac2-c (N-18) is recommended for detection of Slp homolog lacking C2 domains c 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).

Slac2-c (N-18) is also recommended for detection of Slp homolog lacking C2 domains c in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Slac2-c siRNA (h): sc-63038, Slac2-c siRNA (m): sc-63039, Slac2-c shRNA Plasmid (h): sc-63038-SH, Slac2-c shRNA Plasmid (m): sc-63039-SH, Slac2-c shRNA (h) Lentiviral Particles: sc-63038-V and Slac2-c shRNA (m) Lentiviral Particles: sc-63039-V.

Molecular Weight of Slac2-c: 96 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.

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.

PROTOCOLS

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