SANTA CRUZ BIOTECHNOLOGY, INC.

RIN3 (B-17): sc-102089



The Power to Question

BACKGROUND

The Ras oncogene family, whose members include Rab 5B and Rab 5C, encode membrane-associated small G proteins that are regulated, in part, by the activity of guanine nucleotide exchange factors (GEFs). The RIN family of Ras interaction-interference proteins (namely RIN1, RIN2, RIN3 and RIN4) comprise a group of Rab 5 binding partners that interact with and control Rab 5 function. RIN3 (Ras and Rab interactor 3) is a 984 amino acid member of the RIN family and is thought to associate with Rab 5B and function as a GEF, exchanging bound GDP for free GTP. Expressed throughout the body, RIN3 is a cytoplasmic protein that contains one VPS9 domain, one SH2 domain and one Ras-associating domain. In addition to its probable role as a Rab 5B-associated GEF, RIN3 is thought to participate in intracellular transport between the plasma membrane and early endosomes. Four isoforms of RIN3 exist due to alternative splicing events.

REFERENCES

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- Yoshikawa, M., Kajiho, H., Sakurai, K., Minoda, T., Nakagawa, S., Kontani, K. and Katada, T. 2008. Tyr-phosphorylation signals translocate RIN3, the small GTPase Rab5-GEF, to early endocytic vesicles. Biochem. Biophys. Res. Commun. 372: 168-172.

CHROMOSOMAL LOCATION

Genetic locus: RIN3 (human) mapping to 14q32.12.

STORAGE

Store at 4° C, **D0 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.

SOURCE

RIN3 (B-17) is a purified rabbit polyclonal antibody raised against RIN3 of human origin.

PRODUCT

Each vial contains 100 μg IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

APPLICATIONS

RIN3 (B-17) is recommended for detection of RIN3 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for RIN3 siRNA (h): sc-92246, RIN3 shRNA Plasmid (h): sc-92246-SH and RIN3 shRNA (h) Lentiviral Particles: sc-92246-V.

Molecular Weight of RIN3: 108 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible goat anti-rabbit IgG-HRP: sc-2030 (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).

DATA



RIN3 (B-17): sc-102089. Western blot analysis of RIN3 expression in Hep G2 whole cell lysate.

RESEARCH USE

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