SANTA CRUZ BIOTECHNOLOGY, INC.

RIN1 (N-19): sc-1971

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Ras is a membrane-associated small G protein that is indirectly coupled to receptor and nonreceptor tyrosine kinases. Ras activation is regulated by the levels of bound GTP and GDP. Several effectors of Ras have been identified, including Raf1, PI 3-kinase, and RIN1. RIN1 (Ras interaction/interference) was identified as a Ras-interacting protein in yeast, and it has been shown to bind to the human H-ras. This RIN1-Ras interaction is enhanced when Ras is bound to GTP. Unlike Raf1, RIN1 is localized primarily to the plasma membrane. RIN1 contains an SH_2 domain and an amino-terminal region similar to consensus SH3 domains. RIN1 binds c-Abl, and, like Raf1, interacts with 14-3-3 proteins.

CHROMOSOMAL LOCATION

Genetic locus: RIN1 (human) mapping to 11q13.2; Rin1 (mouse) mapping to 19 A.

SOURCE

RIN1 (N-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of RIN1 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-1971 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

RIN1 (N-19) is recommended for detection of RIN1 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), 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).

Suitable for use as control antibody for RIN1 siRNA (h): sc-40911, RIN1 siRNA (m): sc-40912, RIN1 shRNA Plasmid (h): sc-40911-SH, RIN1 shRNA Plasmid (m): sc-40912-SH, RIN1 shRNA (h) Lentiviral Particles: sc-40911-V and RIN1 shRNA (m) Lentiviral Particles: sc-40912-V.

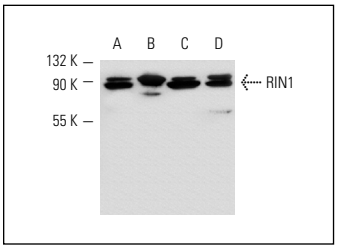
Molecular Weight of RIN1: 84 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, U-87 MG cell lysate: sc-2411 or RIN1 (h2): 293 Lysate: sc-171832.

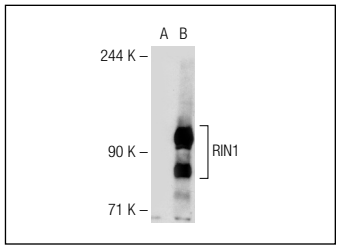
RECOMMENDED SECONDARY REAGENTS

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

DATA



RIN1 (N-19): sc-1971. Western blot analysis of RIN1 expression in HeLa (**A**), K-562 (**B**), U-87 MG (**C**) and IMR-32 (**D**) whole cell lysates.



RIN1 (N-19): sc-1971. Western blot analysis of RIN1 expression in non-transfected: sc-110760 (**A**) and human RIN1 transfected: sc-171832 (**B**) 293 whole cell lysates.

SELECT PRODUCT CITATIONS

1. Chetcuti, A., et al. 2011. Expression profiling reveals MSX1 and EphB2 expression correlates with the invasion capacity of Wilms tumors. Pediatr. Blood Cancer 57: 950-957.
2. Wang, Q., et al. 2012. Prognostic significance of RIN1 gene expression in human non-small cell lung cancer. Acta Histochem. 114: 463-468.
3. Han, K.Y., et al. 2013. Overexpression of MAC30 is associated with poor clinical outcome in human non-small-cell lung cancer. Tumour Biol. 34: 821-825.
4. Wang, L., et al. 2013. High level of FOXC1 expression is associated with poor prognosis in pancreatic ductal adenocarcinoma. Tumour Biol. 34: 853-858.
5. Wei, L.X., et al. 2013. High expression of FOXC1 is associated with poor clinical outcome in non-small cell lung cancer patients. Tumour Biol. 34: 941-946.

RESEARCH USE

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