

RIN1 (T-20): sc-19384

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 SH₂ domain and an amino-terminal region similar to consensus SH3 domains. RIN1 binds c-Abl and, like Raf1, interacts with 14-3-3 proteins.

REFERENCES

- Colicelli, J. 1995. A human protein selected for interference with Ras function interacts directly with Ras and competes with Raf1. *Mol. Cell Biol.* 15: 1318-1323.
- Shoelson, S.E. 1997. SH₂ and PTB domain interactions in tyrosine kinase signal transduction. *Curr. Opin. Chem. Biol.* 1: 227-234.
- Han, L., Wong, D., Dhaka, A., Afar, D., White, M., Xie, W., Herschman, H., Witte, O. and Colicelli, J. 1997. Protein binding and signaling properties of RIN1 suggest a unique effector function. *Proc. Natl. Acad. Sci. USA* 94: 4954-4959.
- Afar, D.E., Han, L., McLaughlin, J., Wong, S., Dhaka, A., Parmar, K., Rosenberg, N., Witte, O.N. and Colicelli, J. 1997. Regulation of the oncogenic activity of BCR-ABL by a tightly bound substrate protein RIN1. *Immunity* 6: 773-782.
- Vojtek, A.B. and Der, C.J. 1998. Increasing complexity of the Ras signaling pathway. *J. Biol. Chem.* 273: 19925-19928.
- Downward, J. 1998. Ras signalling and apoptosis. *Curr. Opin. Genet. Dev.* 8: 49-54.

CHROMOSOMAL LOCATION

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

SOURCE

RIN1 (T-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-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-19384 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.

APPLICATIONS

RIN1 (T-20) is recommended for detection of RIN1 of mouse, rat and human 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).

RIN1 (T-20) is also recommended for detection of RIN1 in additional species, including equine, canine and porcine.

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.

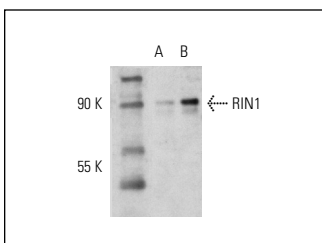
Molecular Weight of RIN1: 84 kDa.

Positive Controls: rat brain extract: sc-2392, K-562 whole cell lysate: sc-2203 or mouse brain extract: sc-2253.

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



RIN1 (T-20): sc-19384. Western blot analysis of RIN1 expression in rat brain (A) and mouse brain (B) tissue extracts.

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.