SANTA CRUZ BIOTECHNOLOGY, INC.

RIP3 (M-42): sc-135171

BACKGROUND

The death domain is a cytoplasmic domain of approximately 80 amino acids that is necessary for the transduction of apoptotic signals and is present in the apoptosis-mediating receptors TNF-R1 and FAS. Other death domain-containing, but otherwise structurally unrelated proteins have been identified on the basis of their ability to associate with the cytoplasmic domains of TNF-R1 or FAS. One of these proteins, the receptor-interacting protein 3 (RIP3), contains an N-terminal kinase domain and shares extensive homology with RIP and RIP2. However, RIP3 contains a unique C-terminal death domain, which promotes apoptosis. RIP3 can be expressed as two splice variants, RIP3β and RIP3γ, which contain a truncated N-terminal kinase domain and a distinct and shorter C-terminus. Subsequently, expression of these splice variants downregulates RIP3-mediated apoptosis.

REFERENCES

1. Sun, X., et al. 1999. RIP3, a novel apoptosis-inducing kinase. J. Biol. Chem. 274: 16871-16875.
2. Yu, P.W., et al. 1999. Identification of RIP3, a RIP-like kinase that activates apoptosis and NFκB. Curr. Biol. 9: 539-542.
3. Kasof, G.M., et al. 2000. The RIP-like kinase, RIP3, induces apoptosis and NFκB nuclear translocation and localizes to mitochondria. FEBS Lett. 473: 285-291.

CHROMOSOMAL LOCATION

Genetic locus: RIPK3 (human) mapping to 14q12; Ripk3 (mouse) mapping to 14 C3.

SOURCE

RIP3 (M-42) is a rabbit polyclonal antibody raised against amino acids 139-180 mapping within an internal region of RIP3 of mouse origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

RIP3 (M-42) is recommended for detection of RIP3 of mouse, rat and, to a lesser extent, 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).

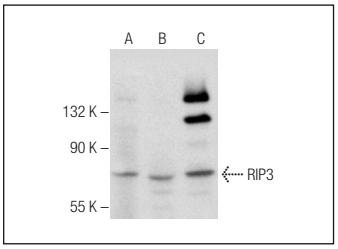
Suitable for use as control antibody for RIP3 siRNA (h): sc-61482, RIP3 siRNA (m): sc-61483, RIP3 shRNA Plasmid (h): sc-61482-SH, RIP3 shRNA Plasmid (m): sc-61483-SH, RIP3 shRNA (h) Lentiviral Particles: sc-61482-V and RIP3 shRNA (m) Lentiviral Particles: sc-61483-V.

Molecular Weight of RIP3: 60 kDa.

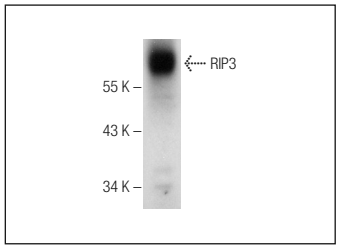
RECOMMENDED SECONDARY REAGENTS

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). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



RIP3 (M-42): sc-135171. Western blot analysis of RIP3 expression in human skeletal (**A**) and human stomach (**B**) tissue extract and HeLa whole cell lysate (**C**).



RIP3 (M-42): sc-135171. Western blot analysis of RIP3 expression in human small intestine tissue extract.

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.