SANTA CRUZ BIOTECHNOLOGY, INC.

RIP3 (N-14): sc-47368



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, RIP3 β and RIP3 γ , 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

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- 2 Kasof, GM., Prosser, J.C., Liu, D., Lorenzi, M.V. and Gomes, B.C. 2000. The RIP-like kinase, RIP3, induces apoptosis and NF-κB nuclear translocation and localizes to mitochondria. FEBS lett. 473: 285-291.
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- Newton, K., Sun, X. and Dixit, V.M. 2004. Kinase RIP3 is dispensable for normal NF-κBs, signaling by the B cell and T cell receptors, tumor necrosis factor receptor 1, and Toll-like receptors 2 and 4. Mol. Cell. Biol. 24: 1464-1469.
- Yang, Y., Hu, W., Feng, S., Ma, J. and Wu, M. 2005. RIP3 β and RIP3 γ, two novel splice variants of receptor-interacting protein 3 (RIP3), downregulate RIP3-induced apoptosis. Biochem. Biophys. Res. Commun. 332: 181-187.

CHROMOSOMAL LOCATION

Genetic locus: RIPK3 (human) mapping to 14q12.

SOURCE

RIP3 (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of RIP3 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-47368 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

RIP3 (N-14) is recommended for detection of RIP3 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)], 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 shRNA Plasmid (h): sc-61482-SH and RIP3 shRNA (h) Lentiviral Particles: sc-61482-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 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) Immunofluo-rescence: use donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

DATA



RIP3 (N-14): sc-47368. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic and membrane localization.

STORAGE

Store at 4° C, **D0 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.



Try RIP3 (B-2): sc-374639 or RIP3 (Rippy-3):

sc-56228, our highly recommended monoclonal aternatives to RIP3 (N-14). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **RIP3 (B-2): sc-374639**.