

RIP4 (H-83): sc-292495

BACKGROUND

The phosphorylation and dephosphorylation of proteins on serine and threonine residues is an essential means of regulating a broad range of cellular functions in eukaryotes, including cell division, homeostasis and apoptosis. A group of proteins that are intimately involved in this process are the serine/threonine (Ser/Thr) protein kinases. RIP4, also known as RIPK4 (receptor-interacting serine/threonine-protein kinase 4), PKK (PKC δ -interacting protein kinase), DIK, ANKK2 or ANKRD3 (Ankyrin repeat domain-containing protein 3), is a peripheral membrane protein that belongs to the TKL Ser/Thr protein kinase family and functions as a receptor-interacting protein (RIP) that modulates epidermal growth and differentiation. RIPs interact with the intracellular domain of tumor necrosis factor receptors (TNFRs) and facilitate downstream signaling and apoptosis induction. RIP4 contains ten Ankyrin-repeats and one protein kinase domain, and participates in the activation of NF κ B. Two isoforms exist due to alternative splicing events.

REFERENCES

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3. Meylan, E., et al. 2002. RIP4 (DIK/PKK), a novel member of the RIP kinase family, activates NF κ B and is processed during apoptosis. *EMBO Rep.* 3: 1201-1208.
4. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 605706. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
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6. Cariappa, A., et al. 2003. A catalytically inactive form of protein kinase C-associated kinase/receptor interacting protein 4, a protein kinase C β -associated kinase that mediates NF κ B activation, interferes with early B cell development. *J. Immunol.* 171: 1875-1880.
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9. Adams, S., et al. 2007. Regulation of NF κ B activity and keratinocyte differentiation by the RIP4 protein: implications for cutaneous wound repair. *J. Invest. Dermatol.* 127: 538-544.

CHROMOSOMAL LOCATION

Genetic locus: RIPK4 (human) mapping to 21q22.3; Ripk4 (mouse) mapping to 16 C4.

SOURCE

RIP4 (H-83) is a rabbit polyclonal antibody raised against amino acids 525-607 mapping near the C-terminus of RIP4 of human origin.

PRODUCT

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

APPLICATIONS

RIP4 (H-83) is recommended for detection of RIP4 of mouse, rat and 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).

RIP4 (H-83) is also recommended for detection of RIP4 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for RIP4 siRNA (h): sc-91500, RIP4 siRNA (m): sc-152974, RIP4 shRNA Plasmid (h): sc-91500-SH, RIP4 shRNA Plasmid (m): sc-152974-SH, RIP4 shRNA (h) Lentiviral Particles: sc-91500-V and RIP4 shRNA (m) Lentiviral Particles: sc-152974-V.

Molecular Weight of RIP4: 100 kDa.

Positive Controls: A-431 whole cell lysate: sc-2201 or HeLa whole cell lysate: sc-2200.

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.

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.


 MONOS
Satisfation
Guaranteed

Try **RIP4 (E-7): sc-377368** or **RIP4 (387.1): sc-100428**, our highly recommended monoclonal alternatives to RIP4 (H-83).