

RIP4 (m): 293T Lysate: sc-123210

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

1. Bhr, C., Rohwer, A., Stempka, L., Rincke, G., Marks, F. and Gschwendt, M. 2000. DIK, a novel protein kinase that interacts with protein kinase C δ . Cloning, characterization, and gene analysis. J. Biol. Chem. 275: 36350-36357.
2. Holland, P., Willis, C., Kanaly, S., Glaccum, M., Warren, A., Charrier, K., Murison, J., Derry, J., Virca, G., Bird, T. and Peschon, J. 2002. RIP4 is an Ankyrin repeat-containing kinase essential for keratinocyte differentiation. Curr. Biol. 12: 1424-1428.
3. Meylan, E., Martinon, F., Thome, M., Gschwendt, M. and Tschopp, J. 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/>

CHROMOSOMAL LOCATION

Genetic locus: Ripk4 (mouse) mapping to 16 C4.

PRODUCT

RIP4 (m): 293T Lysate represents a lysate of mouse RIP4 transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

RIP4 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive RIP4 antibodies. Recommended use: 10-20 μ l per lane.

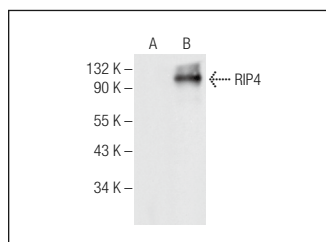
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

RIP4 (E-7): sc-377368 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse RIP4 expression in RIP4 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



RIP4 (E-7): sc-377368. Western blot analysis of RIP4 expression in non-transfected: sc-117752 (A) and mouse RIP4 transfected: sc-123210 (B) 293T whole cell lysates.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. 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 for detailed protocols and support products.