## SANTA CRUZ BIOTECHNOLOGY, INC.

# RIP (K-20): sc-1169



#### BACKGROUND

In contrast to growth factors which promote cell proliferation, FAS ligand (FAS-L) and the tumor necrosis factors (TNFs) rapidly induce apoptosis. Cellular response to FAS-L and TNF is mediated by structurally related receptors containing a conserved "death domain" and belonging to the TNF receptor superfamily. TRADD, FADD and RIP are FAS/TNF-R1-interacting proteins that contain a death domain homologous region (DDH). TRADD (TNF-R1-associated death domain) and FADD (FAS-associated death domain) associate with the death domains of both FAS and TNF-R1 via their DDH regions. Overexpression of TRADD leads to NF $\kappa$ B activation and apoptosis in the absence of TNF. Overexpression of FADD causes apoptosis, which can be blocked by the cow pox protein CrmA, suggesting that FADD lies upstream of ICE and possibly other serine proteases. The receptor interacting protein, RIP, associates with FAS exclusively via its DDH, and this association is abrogated in LPR mutants. Unlike TRADD and FADD, RIP contains a putative amino terminal kinase domain.

#### CHROMOSOMAL LOCATION

Genetic locus: RIPK1 (human) mapping to 6p25.2; Ripk1 (mouse) mapping to 13 A3.3.

#### SOURCE

RIP (K-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of RIP of human origin.

#### PRODUCT

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

Blocking peptide available for competition studies, sc-1169 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### APPLICATIONS

RIP (K-20) is recommended for detection of RIP 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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

Suitable for use as control antibody for RIP siRNA (h): sc-36426, RIP siRNA (m): sc-36427, RIP shRNA Plasmid (h): sc-36426-SH, RIP shRNA Plasmid (m): sc-36427-SH, RIP shRNA (h) Lentiviral Particles: sc-36426-V and RIP shRNA (m) Lentiviral Particles: sc-36427-V.

Molecular Weight of RIP: 74 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, JEG-3 whole cell lysate: sc-364255 or T24 cell lysate: sc-2292.

#### STORAGE

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## DATA





RIP (K-20): sc-1169. Western blot analysis of human RIP carboxy-terminal domain-containing fusion protein. RIP (K-20): sc-1169. Immunoperoxidase staining of formalin fixed, paraffin-embedded human gall bladder tissue showing cytoplasmic and membrane staining of glandular cells.

#### SELECT PRODUCT CITATIONS

- 1. Bulfone-Paus, S., et al. 1999. Death deflected: IL-15 inhibits TNF- $\alpha$ -mediated apoptosis in fibroblasts by TRAF2 recruitment to the IL-15R $\alpha$  chain. FASEB J. 13: 1575-1585.
- 2. Wang, Y., et al. 2000. Stat1 as a component of Tumor Necrosis Factor  $\alpha$ Receptor 1-TRADD signaling complex to inhibit NF $\kappa$ B activation. Mol. Cell. Biol. 20: 4505-4512.
- Kamiyama, H., et al. 2008. Epoxyquinol B, a naturally occurring pentaketide dimer, inhibits NFκB signaling by crosslinking TAK1. Biosci. Biotechnol. Biochem. 72: 1894-1900.
- Wang, D., et al. 2009. Reduced tumor necrosis factor receptor-associated death domain expression is associated with prostate cancer progression. Cancer Res. 69: 9448-9456.

#### **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.

# MONOS Satisfation Guaranteed

Try **RIP (C-12): sc-133102**, our highly recommended monoclonal aternative to RIP (K-20). Also, for AC, HRP, FITC, PE, Alexa Fluor<sup>®</sup> 488 and Alexa Fluor<sup>®</sup> 647 conjugates, see **RIP (C-12): sc-133102**.