# SANTA CRUZ BIOTECHNOLOGY, INC.

# SODD (N-19): sc-9179



#### BACKGROUND

The cytokine TNF (tumor necrosis factor) signals through the TNF-R1 receptor to activate various cellular pathways, including apoptosis and NF $\kappa$ B activation. TNF binding induces receptor aggregation, resulting in the recruitment of TRADD, FADD, TRAF2 and RIP to the intracellular "death" domain of the receptor complex, which in turn activates signaling pathways including apoptosis and NF $\kappa$ B activation. SODD, for silencer of death domains, was found to be associated with the intracellular "death" domain of TNF-R1 in the absence of TNF stimulation. TNF treatment results in the release of SODD from TNF-R1, allowing the recruitment of TRADD and TRAF2 to the receptor complex. Thus, SODD may play a role in preventing spontaneous signaling by death-domain receptors, in the absence of ligand.

## CHROMOSOMAL LOCATION

Genetic locus: BAG4 (human) mapping to 8p11.23.

#### SOURCE

SODD (N-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of SODD of human origin.

#### PRODUCT

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

Blocking peptide available for competition studies, sc-9179 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **APPLICATIONS**

SODD (N-19) is recommended for detection of SODD of 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).

SODD (N-19) is also recommended for detection of SODD in additional species, including canine and bovine.

Suitable for use as control antibody for SODD siRNA (h): sc-106839, SODD shRNA Plasmid (h): sc-106839-SH and SODD shRNA (h) Lentiviral Particles: sc-106839-V.

Molecular Weight of SODD: 49 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

#### **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.

#### **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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz<sup>™</sup> Mounting Medium: sc-24941. 4) Immuno-histochemistry: use ImmunoCruz<sup>™</sup>: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

### DATA





SODD (N-19): sc-9179. Western blot analysis of SODD expression in HeLa whole cell lysate.

SODD (N-19): sc-9179. Immunoperoxidase staining of formalin fixed, paraffin-embedded human fallopian tube tissue showing cytoplasmic staining of glandular cells.

#### SELECT PRODUCT CITATIONS

- Eichholtz-Wirth, H., et al. 2000. IκB/NFκB mediated cisplatin resistance in HeLa cells after low-dose γ-irradiation is associated with altered SODD expression. Apoptosis 5: 255-263.
- Eichholtz-Wirth, H., et al. 2003. Overexpression of the "silencer of death domain", SODD/Bag-4, modulates both TNFR1- and CD95-dependent cell death pathways. Cancer Lett. 194: 81-89.
- 3. Takada, H., et al. 2003. Role of SODD in regulation of tumor necrosis factor responses. Mol. Cell. Biol. 23: 4026-4033.
- Gehrmann, M., et al. 2005. Dual function of membrane-bound heat shock protein 70 (HSP 70), Bag-4, and HSP 40: protection against radiationinduced effects and target structure for natural killer cells. Cell Death Differ. 12: 38-51.

# MONOS Satisfation Guaranteed

Try **SODD (C-12): sc-166581**, our highly recommended monoclonal alternative to SODD (N-19).