# DAP-1 (A-16): sc-12191



The Power to Overtion

#### **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 cytoplasmic region called the "death domain". DAP-1 (for death associated protein-1) is a basic, proline-rich, 15 kDa protein expressed in gamma interferon (IFN- $\gamma$ )-induced HeLa cells. DAP-1 is a member of the ubiquitin homology (UbH) family which also includes PIC 1 and SIII p18 elogin protein. DAP-1 interacts with the death domain of TNF-R1 and can trigger programmed cell death in a variety of cell lines, as well as suppress NF- $\kappa$ B/Rel activity.

# **REFERENCES**

- Tartaglia, L.A., et al. 1993. A novel domain within the 55 kd TNF receptor signals cell death. Cell 74: 845-853.
- Itoh, N., et al. 1993. A novel protein domain required for apoptosis.
  Mutational analysis of human Fas antigen. J. Biol. Chem. 268: 10932-10937.
- Smith, C.A., et al. 1994. The TNF receptor superfamily of cellular and viral proteins: activation, costimulation, and death. Cell 76: 959-962.
- 4. Nagata, S., et al. 1995. The Fas death factor. Science 267: 1449-1456.
- Deiss, L.P., et al. 1995. Identification of a novel serine/threonine kinase and a novel 15-kD protein as potential mediators of the gamma interferoninduced cell death. Genes Dev. 9: 15-30.
- Garrett, K.P., et al. 1995. Positive regulation of general transcription factor SIII by a tailed ubiquitin homolog. Proc. Natl. Acad Sci. USA 92: 7172-7176.
- 7. Boddy, M.N., et al. 1996. PIC 1, a novel ubiquitin-like protein which interacts with the PML component of a multiprotein complex that is disrupted in acute promyelocytic leukaemia. Oncogene 13: 971-982.
- 8. Ware, C.F., et al. 1996. Apoptosis mediated by the TNF-related cytokine and receptor families. J. Cell. Biochem. 60: 47-55.
- 9. Liou, M.L., et al. 1999. The ubiquitin-homology protein, DAP-1, associates with tumor necrosis factor receptor (p60) death domain and induces apoptosis. Biol. Chem. 274: 10145-10153.

# CHROMOSOMAL LOCATION

Genetic locus: DAP (human) mapping to 5p15.2; Dap (mouse) mapping to 15 B2.

## **SOURCE**

DAP-1 (A-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of DAP-1 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-12191 P, (100  $\mu g$  peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

#### **APPLICATIONS**

DAP-1 (A-16) is recommended for detection of DAP-1 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

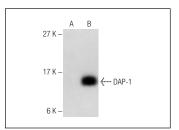
DAP-1 (A-16) is also recommended for detection of DAP-1 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for DAP-1 siRNA (h): sc-37379, DAP-1 siRNA (m): sc-37380, DAP-1 shRNA Plasmid (h): sc-37379-SH, DAP-1 shRNA Plasmid (m): sc-37380-SH, DAP-1 shRNA (h) Lentiviral Particles: sc-37379-V and DAP-1 shRNA (m) Lentiviral Particles: sc-37380-V.

Molecular Weight of DAP-1: 15 kDa.

Positive Controls: DAP-1 (m): 293T Lysate: sc-119657.

#### **DATA**



DAP-1 (A-16): sc-12191. Western blot analysis of DAP-1 expression in non-transfected: sc-117752 (**A**) and mouse DAP-1 transfected: sc-119657 (**B**) 293T whole

## **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.

#### **PROTOCOLS**

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **DAP-1 (C-8): sc-376754**, our highly recommended monoclonal alternative to DAP-1 (A-16).

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3800 fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com