SANTA CRUZ BIOTECHNOLOGY, INC.

DAP-1 (N-16): sc-12190

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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-γ)-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-κB/Rel activity.

REFERENCES

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2. Itoh, N., et al. 1993. A novel protein domain required for apoptosis. Mutational analysis of human Fas antigen. J. Biol. Chem. 268: 10932-10937.
3. 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.
5. 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 interferon-induced cell death. Genes Dev. 9: 15-30.
6. 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 (N-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of DAP-1 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-12190 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

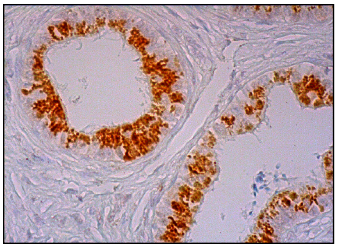
APPLICATIONS

DAP-1 (N-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), 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).

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.

DATA



DAP-1 (N-16): sc-12190. Immunoperoxidase staining of formalin fixed, paraffin-embedded human epididymis tissue showing cytoplasmic staining of glandular cells.

SELECT PRODUCT CITATIONS

1. Jia, Y., et al. 2014. Death associated protein 1 is correlated with the clinical outcome of patients with colorectal cancer and has a role in the regulation of cell death. Oncol. Rep. 31: 175-182.

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.