

DAP-1 (C-8): sc-376754

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 protein expressed in γ interferon (IFN- γ)-induced HeLa cells. DAP-1 is a member of the ubiquitin homology (UbH) family which also includes SUMO-1 and SIII p18 e1ogin 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 κ B/Rel activity.

REFERENCES

1. Tartaglia, L.A., et al. 1993. A novel domain within the 55 kd TNF receptor signals cell death. *Cell* 74: 845-853.
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 γ 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.

CHROMOSOMAL LOCATION

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

SOURCE

DAP-1 (C-8) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 11-45 near the N-terminus of DAP-1 of human origin.

PRODUCT

Each vial contains 200 μ g IgG $_1$ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

DAP-1 (C-8) is available conjugated to agarose (sc-376754 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-376754 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-376754 PE), fluorescein (sc-376754 FITC), Alexa Fluor[®] 488 (sc-376754 AF488), Alexa Fluor[®] 546 (sc-376754 AF546), Alexa Fluor[®] 594 (sc-376754 AF594) or Alexa Fluor[®] 647 (sc-376754 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-376754 AF680) or Alexa Fluor[®] 790 (sc-376754 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-376754 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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APPLICATIONS

DAP-1 (C-8) is recommended for detection of DAP-1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

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.

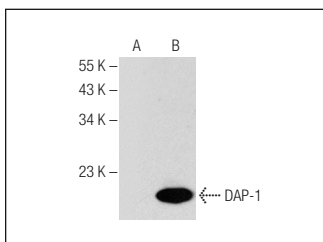
Molecular Weight of DAP-1: 15 kDa.

Positive Controls: DAP-1 (m): 293T Lysate: sc-119658.

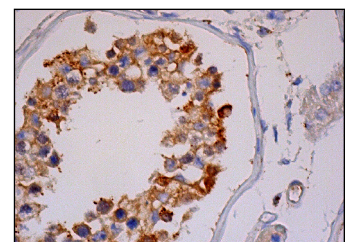
RECOMMENDED SUPPORT REAGENTS

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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgG κ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



DAP-1 (C-8): sc-376754. Western blot analysis of DAP-1 expression in non-transfected: sc-117752 (A) and mouse DAP-1 transfected: sc-119658 (B) 293T whole cell lysates.



DAP-1 (C-8): sc-376754. Immunoperoxidase staining of formalin fixed, paraffin-embedded human testis tissue showing cytoplasmic staining of cells in seminiferous ducts.

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.