

DAP-3 (10): sc-135876

BACKGROUND

The death-associated protein 3 (DAP-3), is a nucleotide-binding protein that contains a potential P-loop motif. It is a positive mediator of programmed cell death; overexpressed intact full-length protein is required in order to induce apoptosis. DAP-3 functions downstream of its receptor signaling complex and its death promoting effects depend on caspase activity. It also interacts with the glucocorticoid receptor (GR), where its main interaction domain is the amino-terminal region, which acts in a dominant-negative fashion to protect cells from apoptosis. DAP-3 protein may also play a role in modulating the cytoplasmic GR/HSP 90 complex. It is conserved at the functional, as well as the structural level, and is ubiquitously expressed in highly proliferative epithelial compartments of various tissues. Unlike a number of other proteins, DAP-3 retains its mitochondrial localization during the induction of apoptosis.

REFERENCES

1. Kissil, J.L., et al. 1995. Isolation of DAP-3, a novel mediator of interferon- γ -induced cell death. *J. Biol. Chem.* 270: 27932-27936.
2. Levy-Strumpf, N., et al. 1998. Death associated proteins (DAPs): from gene identification to the analysis of their apoptotic and tumor suppressive functions. *Oncogene* 17: 3331-3340.
3. Kissil, J.L., et al. 1999. Structure-function analysis of an evolutionary conserved protein, DAP-3, which mediates TNF α - and Fas-induced cell death. *EMBO J.* 18: 353-362.
4. Kimchi, A. 1999. DAP kinase and DAP-3: novel positive mediators of apoptosis. *Ann. Rheum. Dis.* 58: 114-119.
5. Hulkko, S.M., et al. 2000. The pro-apoptotic protein death-associated protein 3 (DAP-3) interacts with the glucocorticoid receptor and affects the receptor function. *Biochem. J.* 349: 885-893.
6. Berger, T., et al. 2000. The apoptosis mediator mDAP-3 is a novel member of a conserved family of mitochondrial proteins. *J. Cell Sci.* 113: 3603-3612.
7. Mariani, L., et al. 2001. Death-associated protein 3 (DAP-3) is overexpressed in invasive glioblastoma cells *in vivo* and in glioma cell lines with induced motility phenotype *in vitro*. *Clin. Cancer Res.* 7: 2480-2489.

CHROMOSOMAL LOCATION

Genetic locus: DAP3 (human) mapping to 1q22; Dap3 (mouse) mapping to 3 F1.

SOURCE

DAP-3 (10) is a mouse monoclonal antibody raised against amino acids 98-248 of DAP-3 of human origin.

PRODUCT

Each vial contains 50 μ g IgG₁ in 500 μ l of PBS with < 0.1% sodium azide, 0.1% gelatin, 20% glycerol and 0.04% stabilizer protein.

STORAGE

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

APPLICATIONS

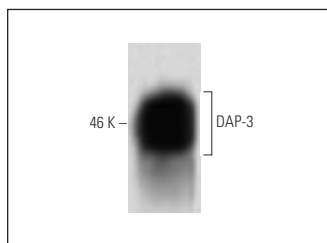
DAP-3 (10) is recommended for detection of DAP-3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500); not recommended for immunoprecipitation.

Suitable for use as control antibody for DAP-3 siRNA (h): sc-37381, DAP-3 siRNA (m): sc-155880, DAP-3 shRNA Plasmid (h): sc-37381-SH, DAP-3 shRNA Plasmid (m): sc-155880-SH, DAP-3 shRNA (h) Lentiviral Particles: sc-37381-V and DAP-3 shRNA (m) Lentiviral Particles: sc-155880-V.

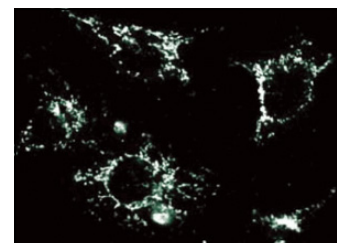
Molecular Weight of DAP-3: 46 kDa.

Positive Controls: SW-13 cell lysate: sc-24778, HeLa whole cell lysate: sc-2200 or Daudi cell lysate: sc-2415.

DATA



DAP-3 (10): sc-135876. Western blot analysis of DAP-3 expression in SW-13 whole cell lysate.



DAP-3 (10): sc-135876. Immunofluorescence staining of human endothelial cells showing cytoplasmic localization.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

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