

Daxx (S-20): sc-7001

BACKGROUND

Activation of the cell surface receptor FAS by FAS ligand leads to the initiation of apoptosis, a process necessary for the regulation of the immune system and tissue homeostasis. FAS-mediated apoptosis appears to involve a number of divergent and overlapping pathways. Daxx appears to be a central component of a FAS-mediated apoptotic pathway involving the activation of Jun N-terminal kinase (JNK). Although Daxx itself does not contain a death domain, it specifically binds to the death domain of FAS. Overexpression of Daxx activates the JNK pathway and enhances FAS-mediated apoptosis. The Daxx apoptotic pathway acts cooperatively with but is distinct from the FAS-mediated pathway that involves interactions between the death domain-containing protein FADD and the cysteine protease FLICE. Unlike the FAS-FADD-FLICE pathway, the Daxx pathway is sensitive to the apoptotic inhibitor protein Bcl-2.

REFERENCES

- Chinnaiyan, A.M., et al. 1995. FADD, a novel death domain-containing protein, interacts with the death domain of Fas and initiates apoptosis. *Cell* 81: 505-512.
- Fraser, A. and Evan, G. 1996. A license to kill. *Cell* 85: 781-784.
- Boldin, M.P., et al. 1996. Involvement of MACH, a novel MORT1/FADD-interacting protease, in Fas/APO-1- and TNF receptor-induced cell death. *Cell* 85: 803-815.
- Hsu, H., et al. 1996. TRADD-TRAF2 and TRADD-FADD interactions define two distinct TNF receptor 1 signal transduction pathways. *Cell* 84: 299-308.
- Nagata, S. 1997. Apoptosis by death factor. *Cell* 88: 355-365.
- Goillot, E., et al. 1997. Mitogen-activated protein kinase-mediated Fas apoptotic signaling pathway. *Proc. Natl. Acad. Sci. USA* 94: 3302-3307.
- Yang, X., et al. 1997. Daxx, a novel Fas-binding protein that activates JNK and apoptosis. *Cell* 89: 1067-1076.

CHROMOSOMAL LOCATION

Genetic locus: DAXX (human) mapping to 6p21.32; Daxx (mouse) mapping to 17 B1.

SOURCE

Daxx (S-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Daxx of mouse 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-7001 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

Daxx (S-20) is recommended for detection of Daxx 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), 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).

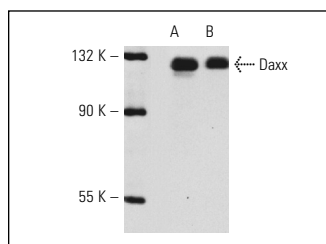
Daxx (S-20) is also recommended for detection of Daxx in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for Daxx siRNA (h): sc-35178, Daxx siRNA (m): sc-35177, Daxx shRNA Plasmid (h): sc-35178-SH, Daxx shRNA Plasmid (m): sc-35177-SH, Daxx shRNA (h) Lentiviral Particles: sc-35178-V and Daxx shRNA (m) Lentiviral Particles: sc-35177-V.

Molecular Weight of Daxx: 120 kDa.

Positive Controls: PC-12 cell lysate: sc-2250, MOLT-4 cell lysate: sc-2233 or Ramos cell lysate: sc-2216.

DATA



Daxx (S-20): sc-7001. Western blot analysis of Daxx expression in MOLT-4 (A) and Ramos (B) whole cell lysates.

SELECT PRODUCT CITATIONS

- Xue, Y., et al. 2003. The ATRX syndrome protein forms a chromatin-remodeling complex with Daxx and localizes in promyelocytic leukemia nuclear bodies. *Proc. Natl. Acad. Sci. USA* 100: 10635-10640.

STORAGE

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

PROTOCOLS

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



Try **Daxx (H-7): sc-8043** or **Daxx (DAXX-01): sc-51586**, our highly recommended monoclonal alternatives to Daxx (S-20). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **Daxx (H-7): sc-8043**.