SANTA CRUZ BIOTECHNOLOGY, INC.

Daxx (DAXX-01): sc-51586



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 tast 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

- 1. 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.
- Hsu, H., et al. 1996. TRADD-TRAF2 and TRADD-FADD interactions define two distinct TNF receptor 1 signal transduction pathways. Cell 84: 299-308.
- 3. 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/FADDinteracting protease, in FAS/APO-1- and TNF receptor-induced cell death. Cell 85: 803-815.
- 5. 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.
- Kiriakidou, M., et al. 1997. Cloning and expression of primate Daxx cDNAs and mapping of the human gene to chromosome 6p21.3 in the MHC region. DNA Cell Biol. 16: 1289-1298.
- Park, J., et al. 2007. Inhibition of NFκB acetylation and its transcriptional activity by Daxx. J. Mol. Biol. 368: 388-397.

CHROMOSOMAL LOCATION

Genetic locus: DAXX (human) mapping to 6p21.32.

SOURCE

Daxx (DAXX-01) is a mouse monoclonal antibody raised against amino acids 558-740 of Daxx of human origin.

PRODUCT

Each vial contains 100 $\mu g~lg G_1$ in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Daxx (DAXX-01) is recommended for detection of Daxx of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

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

Molecular Weight of Daxx: 120 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, MOLT-4 cell lysate: sc-2233 or Ramos cell lysate: sc-2216.

DATA



Daxx (DAXX-01): sc-51586. Western blot analysis of Daxx expression in HeLa (**A**), MOLT-4 (**B**), Ramos (**C**), K-562 (**D**) and Raji (**E**) whole cell lysates.

SELECT PRODUCT CITATIONS

- Lu, Y., et al. 2016. Stimulation of the replication of ICPO-null mutant herpes simplex virus 1 and pp71-deficient human cytomegalovirus by Epstein-Barr virus tegument protein BNRF1. J. Virol. 90: 9664-9673.
- Lee, J.S., et al. 2022. SENP2 suppresses browning of white adipose tissues by de-conjugating SUMO from C/EBPβ. Cell Rep. 38: 110408.

STORAGE

Store at 4° C, **D0 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 for detailed protocols and support products.



See **Daxx (H-7): sc-8043** for Daxx antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor[®] 488, 546, 594, 647, 680 and 790.