

BACKGROUND

The death domain-associated protein (Daxx) is a multifunctional protein. It exerts many reported functions that include mediating the signaling from FasL to apoptosis via activating the c-Jun N-terminal kinase (JNK) induction and inhibition of apoptosis, and regulation of chromatin remodeling. Daxx resides in multiple locations in the nucleus and in the cytoplasm. It was originally cloned as a CD95 (FAS)-interacting protein and modulator of FAS-induced cell death.¹ It interacts with a wide variety of proteins, such as apoptosis antigen Fas, centromere protein C, and as HDAC1, HDAC2, androgen receptor (AR), Smad4, p53, paired box gene 3 (Pax3), and Axin. In the nucleus, Daxx functions as a potent transcription repressor that binds to sumoylated transcription factors. Its repression can be relieved by the sequestration of this protein into promyelocytic leukemia nuclear bodies or nucleoli.² This protein also associates with centromeres in G2 phase. In the cytoplasm, the encoded protein may function to regulate apoptosis. The subcellular localization and function of this protein are modulated by post-translational modifications, including sumoylation, phosphorylation and polyubiquitination.³ Alternative splicing results in multiple transcript variants.

References:

1. Salomoni, P. & Khelifi, A.F.: Trends Cell Biol. 16:97-104, 2006
2. Chen, S.F. et al: Ai Zheng 28:1333-6, 2009
3. Lin, S.C. & Li, Q.: Cell Res. 17:301-2, 2007

TECHNICAL INFORMATION

Source:

Daxx Antibody is a mouse monoclonal antibody raised against purified recombinant human Daxx fragments expressed in *E. coli*.

Specificity and Sensitivity:

This antibody detects endogenous Daxx proteins without cross-reactivity with other family members.

Storage Buffer: PBS and 30% glycerol

Storage:

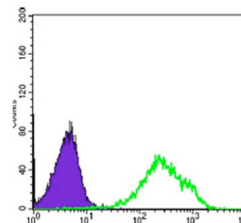
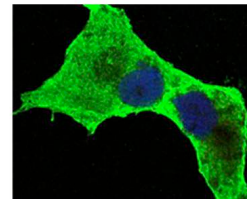
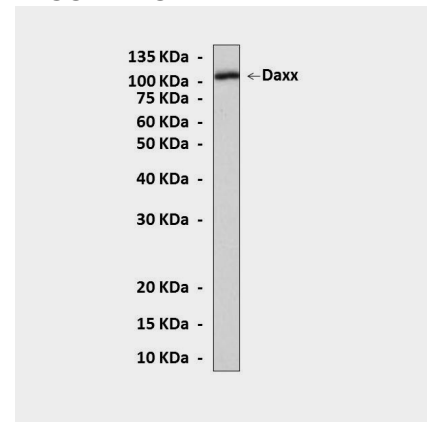
Store at -20°C for at least one year. Store at 4°C for frequent use. Avoid repeated freeze-thaw cycles.

APPLICATIONS

Application:	*Dilution:
WB	1:1,000
IP	1:50
ICC	1:200
FACS	1:200

**Optimal dilutions must be determined by end user.*

QUALITY CONTROL DATA



Top: Western Blot detection of Daxx proteins in K562 using Daxx Antibody. **Middle:** This antibody stains Panc-1 cells in confocal immunofluorescent testing. **Bottom:** It also detects Daxx proteins (Green) vs. negative control mouse IgG (Purple) in HeLa cells in FACS analysis.

