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ProductInformation

ANTI-DAXX
Developed in Rabbit, IgG Fraction of Antiserum

Product Number **D 7810**

Product Description

Anti-Daxx is developed in rabbit using a synthetic peptide corresponding to the C-terminus of human Daxx (amino acids 721-740) conjugated to KLH as immunogen. This sequence is identical in mouse and monkey Daxx sequences. Whole antiserum is fractionated and then further purified by ion-exchange chromatography to provide the IgG fraction of antiserum that is essentially free of other rabbit serum proteins.

Anti-Daxx specifically recognizes human Daxx (120 kDa). Applications include the detection and localization of Daxx by immunoblotting. Staining of Daxx in immunoblotting is specifically inhibited with the Daxx immunizing peptide (human, amino acids 721-740).

Apoptosis, or programmed cell death, occurs during normal cellular differentiation, embryonic development, tissue homeostasis in the adult organism and in the control of the immune system. Daxx, (also known as EAP1 or ETS associated protein 1), was originally identified as an adaptor protein that binds to the death domain of Fas. Daxx acts as a pro-apoptotic molecule that can specifically enhance Fas-induced apoptosis by activating the Jun N-terminal kinase (JNK) signaling pathway, through its interaction with the apoptosis signal-regulating kinase 1 (ASK1).[1-3] Daxx protein (120kD), contains a nuclear localization signal sequence and is highly acidic due to extended glutamic acid-rich domains. Daxx mRNA is widely expressed in fetal and adult human and mouse tissues.[4] Daxx has also been found in the nucleus where it localizes with the pro-myelocytic leukemia protein (PML) of acute pro-myelocytic leukemia (APL).[5-7] Upon mitogenic activation of splenic lymphocytes, Daxx is dramatically upregulated and accumulates in the PML nuclear body (NB or nuclear domain ND10), where it interacts with PML. In the absence of PML, Daxx acquires a dispersed nuclear pattern, and induced cell death of splenocytes is profoundly impaired. PML inactivation results in the complete abrogation of the Daxx proapoptotic ability. In APL cells, Daxx is delocalized from the NB. Upon retinoic acid treatment of APL cells, which induces disease remission in APL, Daxx relocalizes to the PML NBs, suggesting that PML and Daxx cooperate in a novel NB-dependent pathway for apoptosis. Daxx interacts with ETS1 transcription factor and are both colocalized in the nucleus.[8] Interaction of Daxx and ETS1 causes repression of transcriptional activation of the MMP1 and Bcl2 genes. Daxx deficient mice die at embryonic stage, showing extensive apoptosis, suggesting that Daxx may be involved in the suppression of apoptosis in the early embryo development.[9]

Reagents

Anti-Daxx is supplied as an IgG fraction of antiserum in 0.01 M phosphate buffered saline, pH 7.4, containing 15 mM sodium azide.

Precautions and Disclaimer

Due to the sodium azide content a material safety sheet (MSDS) for this product has been sent to the attention of the safety officer of your institution.
Consult the MSDS for information regarding hazardous and safe handling practices.

Storage/Stability

For continuous use, store at 2-8°C for up to one month. For extended storage, freeze in working aliquots. Repeated freezing and thawing is not recommended. Storage in "frost-free" freezers is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

Product Profile

A minimum working dilution of 1:4,000 is determined by immunoblotting using a whole extract of the human acute lymphoma Jurkat cell line.

Note: In order to obtain best results and assay sensitivity in different techniques and preparations we recommend determining optimal working dilutions by titration test.

References

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