

Anti-Daxx Antibody

Catalog # ABO11117

Specification

Anti-Daxx Antibody - Product Information

ApplicationWBPrimary AccessionO9UER7HostRabbitReactivityHuman, Mouse, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit lgG polyclonal antibody for Death domain-associated protein 6(DAXX) detection. Testedwith WB in Human; Mouse; Rat.

Reconstitution Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-Daxx Antibody - Additional Information

Gene ID 1616

Other Names Death domain-associated protein 6, Daxx, hDaxx, ETS1-associated protein 1, EAP1, Fas death domain-associated protein, DAXX, BING2, DAP6

Calculated MW 81373 MW KDa

Application Details Western blot, 0.1-0.5 μg/ml, Human, Mouse, Rat

Subcellular Localization

Cytoplasm. Nucleus, nucleoplasm. Nucleus, PML body . Nucleus, nucleolus. Chromosome, centromere. Dispersed throughout the nucleoplasm, in PML/POD/ND10 nuclear bodies, and in nucleoli. Colocalizes with histone H3.3, ATRX, HIRA and ASF1A at PML-nuclear bodies. Colocalizes with a subset of interphase centromeres, but is absent from mitotic centromeres. Detected in cytoplasmic punctate structures. Translocates from the nucleus to the cytoplasm upon glucose deprivation or oxidative stress. Colocalizes with RASSF1 in the nucleus. Colocalizes with USP7 in nucleoplasma with accumulation in speckled structures.

Tissue Specificity Ubiquitous.

Protein Name Death domain-associated protein 6

Contents Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.



Immunogen

A synthetic peptide corresponding to a sequence in the middle region of human Daxx(325-341aa QERRHLDLIYNFGCHLT), identical to the related mouse and rat sequences.

Purification Immunogen affinity purified.

Cross Reactivity No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities Belongs to the DAXX family.

Anti-Daxx Antibody - Protein Information

Name DAXX

Synonyms BING2, DAP6

Function

Transcription corepressor known to repress transcriptional potential of several sumoylated transcription factors. Down-regulates basal and activated transcription. Its transcription repressor activity is modulated by recruiting it to subnuclear compartments like the nucleolus or PML/POD/ND10 nuclear bodies through interactions with MCSR1 and PML, respectively. Seems to regulate transcription in PML/POD/ND10 nuclear bodies together with PML and may influence TNFRSF6-dependent apoptosis thereby. Inhibits transcriptional activation of PAX3 and ETS1 through direct protein-protein interactions. Modulates PAX5 activity; the function seems to involve CREBBP. Acts as an adapter protein in a MDM2-DAXX-USP7 complex by regulating the RING-finger E3 ligase MDM2 ubiquitination activity. Under non-stress condition, in association with the deubiquitinating USP7, prevents MDM2 self-ubiquitination and enhances the intrinsic E3 ligase activity of MDM2 towards TP53, thereby promoting TP53 ubiquitination and subsequent proteasomal degradation. Upon DNA damage, its association with MDM2 and USP7 is disrupted, resulting in increased MDM2 autoubiquitination and consequently, MDM2 degradation, which leads to TP53 stabilization. Acts as a histone chaperone that facilitates deposition of histone H3.3. Acts as a targeting component of the chromatin remodeling complex ATRX:DAXX which has ATP-dependent DNA translocase activity and catalyzes the replication-independent deposition of histone H3.3 in pericentric DNA repeats outside S-phase and telomeres, and the in vitro remodeling of H3.3-containing nucleosomes. Does not affect the ATPase activity of ATRX but alleviates its transcription repression activity. Upon neuronal activation associates with regulatory elements of selected immediate early genes where it promotes deposition of histone H3.3 which may be linked to transcriptional induction of these genes. Required for the recruitment of histone H3.3:H4 dimers to PML-nuclear bodies (PML-NBs); the process is independent of ATRX and facilitated by ASF1A; PML-NBs are suggested to function as regulatory sites for the incorporation of newly synthesized histone H3.3 into chromatin. In case of overexpression of centromeric histone variant CENPA (as found in various tumors) is involved in its mislocalization to chromosomes; the ectopic localization involves a heterotypic tetramer containing CENPA, and histones H3.3 and H4 and decreases binding of CTCF to chromatin. Proposed to mediate activation of the INK pathway and apoptosis via MAP3K5 in response to signaling from TNFRSF6 and TGFBR2. Interaction with HSPB1/HSP27 may prevent interaction with TNFRSF6 and MAP3K5 and block DAXX-mediated apoptosis. In contrast, in lymphoid cells JNC activation and TNFRSF6-mediated apoptosis may not



involve DAXX. Shows restriction activity towards human cytomegalovirus (HCMV). Plays a role as a positive regulator of the heat shock transcription factor HSF1 activity during the stress protein response (PubMed:>15016915).

Cellular Location

Cytoplasm. Nucleus, nucleoplasm. Nucleus, PML body. Nucleus, nucleolus. Chromosome, centromere Note=Dispersed throughout the nucleoplasm, in PML/POD/ND10 nuclear bodies, and in nucleoli (Probable). Colocalizes with histone H3.3, ATRX, HIRA and ASF1A at PML-nuclear bodies (PubMed:12953102, PubMed:14990586, PubMed:23222847, PubMed:24200965). Colocalizes with a subset of interphase centromeres, but is absent from mitotic centromeres (PubMed:9645950). Detected in cytoplasmic punctate structures (PubMed:11842083). Translocates from the nucleus to the cytoplasm upon glucose deprivation or oxidative stress (PubMed:12968034). Colocalizes with RASSF1 in the nucleus (PubMed:18566590). Colocalizes with USP7 in nucleoplasma with accumulation in speckled structures (PubMed:16845383) [Isoform gamma]: Nucleus. Note=Diffuse nuclear distribution pattern and no comparable dot-like accumulation of isoform 1

Tissue Location Ubiquitous.

Anti-Daxx Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-Daxx Antibody - Images



Anti-Daxx antibody, ABO11117, Western blottingAll lanes: Anti Daxx (ABO11117) at 0.5ug/mlLane 1: HELA Whole Cell Lysate at 40ugLane 2: COLO320 Whole Cell Lysate at 40ugPredicted bind size:



81KDObserved bind size: 81KD

Anti-Daxx Antibody - Background

DAXX(death-domain associated protein) also known as DAP6(Death-associated protein 6) or BING2, was first discovered through its cytoplasmic interaction with the classical death receptor Fas. Human DAXX encodes a 740-amino acid polypeptide containing a nuclear localization signal. Functional analyses by Yang et al.(1997) demonstrated that Daxx binds to the Fas death domain and enhances Fas-mediated apoptosis. The authors suggested that DAXX and FADD define 2 distinct apoptotic pathways downstream of Fas. The DAXX gene is mapped to human chromosome 6p21.3 by somatic cell hybrid panels and fluorescence in situ hybridization, a region containing the HLA and putative autoimmune disease genes. MSP58 overexpression relieved DAXX mutants showed that the N terminus of DAXX interacts with the C terminus of DMAP. Transient expression of DAXXÂ or DMAP1 caused repression of glucocorticoid receptor-mediated transcription.