

Rabbit Anti-DAXX antibody

SL1975R

Product Name:	DAXX
Chinese Name:	死亡相关蛋白6/Fas死亡区相关蛋白抗体
Alias:	BING 2; BING2; DAP 6; DAP6; Death associated protein 6; Fas death domain-associated protein; Death domain associated protein 6; EAP 1; EAP1; ETS1 associated protein 1; Fas death domain associated protein; hDaxx; MGC126245; MGC126246; DAXX_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Pig, Cow, Rabbit, Sheep,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	82kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human DAXX:201-300/740
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>
Product Detail:	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. Proposed to mediate activation of the JNK 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. Seems to regulate transcription in PML/POD/ND10 nuclear bodies together with PML and may influence TNFRSF6-dependent apoptosis thereby. Down-regulates basal and activated transcription. Seems to act as a transcriptional corepressor and inhibits PAX3 and ETS1 through direct protein-protein interaction. Modulates PAX5 activity. 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.

Function:

Transcription corepressor known to repress transcriptional potential of several sumovlated transcription factors. 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. Proposed to mediate activation of the JNK 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. Seems to regulate transcription in PML/POD/ND10 nuclear bodies together with PML and may influence TNFRSF6dependent apoptosis thereby. Down-regulates basal and activated transcription. Seems to act as a transcriptional corepressor and inhibits PAX3 and ETS1 through direct protein-protein interaction. Modulates PAX5 activity. 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.

Subunit:

Homomultimer. Binds to the TNFRSF6 death domain via its C-terminus and to PAX5. Binds to SLC2A4/GLUT4, MAP3K5, TGFBR2, phosphorylated dimeric HSPB1/HSP27, CENPC1, ETS1, sumoylated PML, UBE2I and MCRS1. Is part of a complex containing PAX5 and CREBBP. Interacts with HIPK2 and HIPK3 via its N-terminus. Interacts with HIPK1, which induces translocation from PML/POD/ND10 nuclear bodies to chromatin and enhances association with HDAC1 (By similarity). The non-phosphorylated form binds to PAX3, PAX7, DEK, HDAC1, HDAC2, HDAC3,

acetylated histone H4 and histones H2A, H2B, H3 and H4. Interacts with SPOP. Part of a complex consisting of DAXX, CUL3 and SPOP. Interacts with CBP; the interaction is dependent the sumoylation of CBP and suppresses CBP transcriptional activity via recruitment of HDAC2 directly in the complex with TP53 and HIPK2. Interacts with AXIN1; the interaction stimulates the interaction of DAXX with TP53, stimulates 'Ser-46' phosphorylation of TP53 on and induces cell death on UV irradiation. Interacts with HCMV tegument phosphoprotein pp71. Part of a complex with MDM2, DAXX, RASSF1 and USP7. Part of a complex with DAXX, MDM2 and USP7. Interacts (via N-terminus) with RASSF1 (via C-terminus); the interaction is independent of MDM2 and TP53. Interacts with USP7; the interaction is direct and independent of MDM2 and TP53. Interacts with TP53. Interacts with human cytomegalovirus/HHV-5 protein UL123.

Subcellular 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. 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.

Post-translational modifications:

Sumovlated.

Phosphorylated upon DNA damage, probably by ATM or ATR. Phosphorylated by HIPK1 upon glucose deprivation.

Polyubiquitinated; which is promoted by CUL3 and SPOP and results in proteasomal degradation. Ubiquitinated by MDM2; inducing its degradation. Deubiquitinated by USP7; leading to stabilize it.

Similarity:

Belongs to the DAXX family.

SWISS:

Q9UER7

Gene ID:

1616

Database links:

Entrez Gene: 1616Human

Entrez Gene: 13163 Mouse

Entrez Gene: 140926Rat

Omim: 603186Human

SwissProt: Q9UER7Human

SwissProt: O35613Mouse

SwissProt: Q8VIB2Rat

Unigene: 336916Human

Unigene: 271809Mouse

Unigene: 870Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.