

Datasheet for ABIN3092086
DAXX Protein (AA 1-740) (His tag)[Go to Product page](#)

1 Image

Overview

Quantity:	1 mg
Target:	DAXX
Protein Characteristics:	AA 1-740
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This DAXX protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA, Crystallization (Crys)

Product Details

Sequence:	<p>MATANSIVL DDDDEDEAAA QPGPSHPLPN AASPGAEAPS SSEPHGARGS SSSGGKKCYK</p> <p>LENEKLFEEL LELCKMQTAD HPEVVPFLYN RQQRASHSLFL ASAEFCNLS RVLSRARSRP</p> <p>AKLYVYINEL CTVLKAHSAK KKLNLAPAAAT TSNEPSGNNP PTHLSLDPTN AENTASQSPR</p> <p>TRGSRRQIQRL EQLLALYVA EIRRLQEKEL DLSELDDPDS AYLQEARLKR KLIRLFGRLC</p> <p>ELKDCSSLTG RVIEQRIPYR GTRYPEVNRR IERLINKPGP DTFPDYGDVL RAVEKAAARH</p> <p>SLGLPRQQLQ LMAQDAFRDV GIRLQERRHL DLIYNFGCHL TDDYRPGVDP ALSDPVLARR</p> <p>LRENRLAMS RLDEVISKYA MLQDKSEEGE RKKRRARLQG TSSHSADTPE ASLDSGEGPS</p> <p>GMASQGCPSA SRAETDDEDD EESDEEEEEEE EEEEEEEATD SEEEELEQM QEGQEDDEEE</p> <p>DEEEAAAAGK DGDKSPMSSL QISNEKNLEP GKQISRSSGE QQNKGRIVSP SLLSEEPLAP</p> <p>SSIDAESNGE QPEELTEEE SPVSQLFELE IEALPLDTPS SVETDISSSR KQSEEPFTTV</p> <p>LENGAGMVSS TSFNGGVSPH NWGDSGPPCK KSRKEKKQTG SGPLGNSYVE RQRSVHEKNG</p> <p>KKICTLPSPS SPLASLAPVA DSSTRVDSPS HGLVTSSLCI PSPARLSQTP HSQPPRPGTC</p>
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KTSVATQCDP EEIIVLSDSD

Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.

Characteristics:

- Made in Germany - from design to production - by highly experienced protein experts.
- Human DAXX Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade.
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made to order protein and will be made for the first time for your order. Our experts in the lab will ensure that you receive a correctly folded protein.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization).

When you order this made-to-order protein you will only pay upon receipt of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered.

The concentration of our recombinant proteins is measured using the absorbance at 280nm. The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer.

The concentration of the protein is calculated using its specific absorption coefficient. We use the ExPASy's protparam tool to determine the absorption coefficient of each protein.

Purification:

Two step purification of proteins expressed in baculovirus infected SF9 insect cells:

1. In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. Eluate fractions are analyzed by SDS-PAGE.
2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.

Purity:

>95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.

Sterility:

0.22 µm filtered

Endotoxin Level:

Protein is endotoxin free.

Product Details

Grade: Crystallography grade

Target Details

Target: DAXX

Alternative Name: DAXX ([DAXX Products](#))

Background: 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 histone chaperone that facilitates deposition of histone H3.3. Acts as 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 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

Target Details

apoptosis. In contrast, in lymphoid cells JNC activation and TNFRSF6-mediated apoptosis may not involve DAXX. Shows restriction activity towards human cytomegalovirus (HCMV).

{ECO:0000269|PubMed:12140263, ECO:0000269|PubMed:14990586, ECO:0000269|PubMed:15364927, ECO:0000269|PubMed:16845383, ECO:0000269|PubMed:17081986, ECO:0000269|PubMed:17942542, ECO:0000269|PubMed:20504901, ECO:0000269|PubMed:20651253, ECO:0000269|PubMed:23222847, ECO:0000269|PubMed:24200965, ECO:0000269|PubMed:24530302}.

Molecular Weight: 82.3 kDa Including tag.

UniProt: [Q9UER7](#)

Pathways: [Intracellular Steroid Hormone Receptor Signaling Pathway](#)

Application Details

Application Notes: In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Comment: In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you receive your protein of interest.

Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: 100 mM NaCl, 20 mM Hepes, 10% glycerol. pH value is at the discretion of the manufacturer.

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: Unlimited (if stored properly)



Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process