

Datasheet for ABIN3135059

**DTX3L Protein (AA 2-748) (His tag)**[Go to Product page](#)**1** Image

## Overview

Quantity:	1 mg
Target:	DTX3L
Protein Characteristics:	AA 2-748
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This DTX3L protein is labelled with His tag.
Application:	ELISA, Western Blotting (WB), Crystallization (Crys), SDS-PAGE (SDS)

## Product Details

Sequence:	ASSPDPPSPL LVRLRESIPK AHRKLEIFYQ SRASGGGECS VQPVGPSAPD TYEVKFLKKA DKEKVLKKSE HEMLVHNKPV TIVLETTKKP VEDLRPRLPS LTQPVETPSS RPPSLTGS LD EALCDDIHPQ DGLVSNVSDS VVQKIFLAVT AELNCDLLSK EQRASITTV CPHI KSMEGS DGIKKVCGNF KDIEKIHHL SEQLLEREQK RKGSEQKRKC APQKHTPPDV EREPPDQSSI QVPVLLLEYF KHVNPGRLEF IEYKFGVNIE IQASSPNMVT VGFTSSPFGN VEEASQS FVR DFQKCSQSLK QDCISLEEHQ RAKEVRQELS RCFPKLLIKG QGRTL TLLGS PADISAATEK VSQGLGLRPV KITASGYTTG IEVDSTRFKL LEPELLQEIS EIEQKFNTRG KVQEK GQKTC ILFVPKDKDL DLSVQSYTGF TDAFQRATWQ LRTEVLSLKG LGKERARLHN TKFADNFKKE HPNVHFVTSQ ESVTLTGLPH HLAQAMQYVS KRMGLAPSSG EKLAMDQETP MEISSSDPHG DQQENAALPA PRGTSSSPAA SKGTEDYCVI CMDTISNKHV LPKCKHEFCT SCISKAMLIK PVCPCVCLTSY GIQKGNQPEG TMSYSTQKGS LPGYEGCGTI VINYEIKDGI QTKEHPNPGK AYHGTRRTAY LPDNTEGRKV LDLLHEAFKH RLFTTIGYSR ATGVSDVITW NDIHHKTSKF
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GGPANFGYPD PDYLKRVKEE LKAKGIE

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

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Characteristics:

- Made in Germany - from design to production - by highly experienced protein experts.
- Mouse Dtx3l 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.

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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.

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Purity:

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

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Sterility:

0.22 µm filtered

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Endotoxin Level:

Protein is endotoxin free.

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## Product Details

Grade: Crystallography grade

## Target Details

Target: DTX3L

Alternative Name: Dtx3l ([DTX3L Products](#))

Background: Ubiquitin ligase that mediates monoubiquitination of 'Lys-91' of histone H4 (H4K91ub1), in response to DNA damage. Protects cells exposed to DNA-damaging agents. The exact role of H4K91ub1 in DNA damage response is still unclear but it may function as a licensing signal for additional histone H4 post-translational modifications such as H4 'Lys-20' methylation (H4K20me). Involved in the recruitment of 53BP1/TP53BP1 to sites of DNA damage by mediating H4K91ub1 formation (By similarity). In concert with PARP9, plays a role in PARP1-dependent DNA damage repair. PARP1-dependent PARP9-DTX3L-mediated ubiquitination promotes the rapid and specific recruitment of 53BP1/TP53BP1, UIMC1/RAP80, and BRCA1 to DNA damage sites (By similarity). {ECO:0000250}.

Molecular Weight: 83.9 kDa Including tag.

UniProt: [Q3UIR3](#)

Pathways: [Notch Signaling](#)

## 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: Protein has not been tested for activity yet. 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

Handling Advice:	Avoid repeated freeze-thaw cycles.
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Storage:	-80 °C
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Storage Comment:	Store at -80°C.
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Expiry Date:	Unlimited (if stored properly)
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## Images



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