

Datasheet for ABIN3092206

DNMT3B Protein (AA 1-853) (His tag)[Go to Product page](#)**1** Image

Overview

Quantity:	1 mg
Target:	DNMT3B
Protein Characteristics:	AA 1-853
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This DNMT3B protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA, Crystallization (Crys)

Product Details

Sequence:	MKGDTRHLNG EEDAGGREDS ILVNGACSDQ SSDSPPILEA IRTPEIRGRR SSSRLSKREV SSLLSYTQDL TGDGDGEDGD GSDTPVMPKL FRETRTRSES PAVRTRNNNS VSSRERHRPS PRSTRGRQGR NHVDESPVEF PATRSLRRRA TASAGTPWPS PPSSYLITDL TDDTEDTHGT PQSSSTPYAR LAQDSQQGGM ESPQVEADSG DGDSSEYQDG KEFGIGDLVW GKIKGFSWWP AMVVSWKATS KRQAMSGMRW VQWFGDGKFS EVSADKLVAL GLFSQHFNLA TFNKLVSYRK AMYHALEKAR VRAGKTFPSS PGDSLEDQLK PMLEWAHGGF KPTGIEGLKP NNTQPVVNKS KVRRAISRKL ESRKYENKTR RRTADDSATS DYCPAPKRLK TNCYNNGKDR GDEDQSREQM ASDVANNKSS LEDGCLSCGR KNPVSFHPLF EGGLCQTCRD RFLELFYMYD DDGYQSYCTV CCEGRELLLC SNTSCRCFC VECLEVLVGT GTAAEAKLQE PWSCYMCLPQ RCHGVLRRRK DWNVRLQAFF TSDTGLEYES PKLYPAIPAA RRRPIRVLSL FDGIATGYLV LKELGIKVGK YVASEVCEES IAVGTVKHEG NIKYVNDVRN ITKKNIEEWG PFDLVIGGSP CNDLSNVNPA RKGLYEGTGR LFFEFYHLLN YSRPKEGDDR PFFWMFENVV AMKVGDKRDI SRFLECNPVM
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IDAIKVSAAH RARYFWGNLP GMNRPVIASK NDKLELQDCL EYNRIAKLKK VQTITTKSNS
IKQGKNQLFP VVMNGKEDVL WCTELERIFG FPHYTDVSN MGRGARQKLL GRSWSVPVIR
HLFAPLKDYF ACE

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 DNMT3B 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.
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Purity:

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

Sterility:

0.22 µm filtered

Product Details

Endotoxin Level: Protein is endotoxin free.

Grade: Crystallography grade

Target Details

Target: DNMT3B

Alternative Name: DNMT3B ([DNMT3B Products](#))

Background: Required for genome-wide de novo methylation and is essential for the establishment of DNA methylation patterns during development. DNA methylation is coordinated with methylation of histones. May preferentially methylates nucleosomal DNA within the nucleosome core region. May function as transcriptional co-repressor by associating with CBX4 and independently of DNA methylation. Seems to be involved in gene silencing (By similarity). In association with DNMT1 and via the recruitment of CTCFL/BORIS, involved in activation of BAG1 gene expression by modulating dimethylation of promoter histone H3 at H3K4 and H3K9. Isoforms 4 and 5 are probably not functional due to the deletion of two conserved methyltransferase motifs. Function as transcriptional corepressor by associating with ZHX1. {ECO:0000250, ECO:0000269|PubMed:16357870, ECO:0000269|PubMed:17303076, ECO:0000269|PubMed:18413740, ECO:0000269|PubMed:18567530}.

Molecular Weight: 96.7 kDa Including tag.

UniProt: [Q9UBC3](#)

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

Handling

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)

Images



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