

Datasheet for ABIN3092206

DNMT3B Protein (AA 1-853) (Strep Tag)



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Overview

Quantity:	250 µg
Target:	DNMT3B
Protein Characteristics:	AA 1-853
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This DNMT3B protein is labelled with Strep Tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB), ELISA

Product Details

Brand:	AliCE®
Sequence:	<p>MKGDTRHLNG EEDAGGREDS ILVNGACSDQ SSDSPPILEA IRTPEIRGRR SSSRLSKREV</p> <p>SSLLSYTQDL TGDGDGEDGD GSDTPVMPKL FRETRRSES PAVRTRNNNS VSSRERHRPS</p> <p>PRSTRGRQGR NHVDESPVEF PATRSLRRRA TASAGTPWPS PPSSYLITDL TDDTEDTHGT</p> <p>PQSSSTPYAR LAQDSQQGGM ESPQVEADSG DGDSSEYQDG KEFGIGDLVW GKIKGFSWWP</p> <p>AMVVSWKATS KRQAMSGMRW VQWFGDGKFS EVSADKLVAL GLFSQHFNLA TFNKLVSYRK</p> <p>AMYHALEKAR VRAGKTFPSS PGDSLEDQLK PMLEWAHGGF KPTGIEGLKP NNTQPVVNKS</p> <p>KVRRAGSRKL ESRKYENKTR RRTADDATS DYCPAPKRLK TNCYNNGKDR GDEDQSREQM</p> <p>ASDVANNKSS LEDGCLSCGR KNPVSFHPLF EGGCQTCRD RFLELFYMYD DDGYQSYCTV</p> <p>CCEGRELLLC SNTSCRCFC VECLEVLVGT GTAAEAKLQE PWSCYMCLPQ RCHGVLRRRK</p> <p>DWNVRLQAFF TSDTGLEYES PKLYPAIPAA RRRPIRVLSL FDGIATGYLV LKELGIKVGK</p> <p>YVASEVCEES IAVGTVKHG NIKYVNDVRN ITKKNIEEWG PFDLVIGGSP CNDLSNVNPA</p>

RKGLYEGTGR LFFEFYHLLN YSRPKEGDDR PFFWMFENVV AMKVGDKRDI SRFLECNPVM
IDAIKVSAAH RARYFWGNLP GMNRPVIASK NDKLELQDCL EYNRIAKLKK VQTITTKSNS
IKQGKNQLFP VVMNGKEDVL WCTELERIFG FPDVHYTDVSN MGRGARQKLL GRSWSVPVIR
HLFAPLKDYF ACE

Sequence without tag. The proposed Strep-Tag is based on experience s with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.

Characteristics:

Key Benefits:

- Made in Germany - from design to production - by highly experienced protein experts.
- Protein expressed with ALiCE® and purified in one-step affinity chromatography
- These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed).
- 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 try to ensure that you receive soluble 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.

Expression System:

- ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from *Nicotiana tabacum* c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.
- During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!

Concentration:

- The concentration of our recombinant proteins is measured using the absorbance at 280nm.
- The protein's absorbance will be measured against its specific reference buffer.
- We use the ExPASy's ProtParam tool to determine the absorption coefficient of each protein.

Product Details

Purification: One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®).

Purity: > 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).

Grade: custom-made

Target Details

Target: DNMT3B

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

Background: DNA (cytosine-5)-methyltransferase 3B (Dnmt3b) (EC 2.1.1.37) (DNA methyltransferase HsaIIIB) (DNA MTase HsaIIIB) (M.HsaIIIB),FUNCTION: 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. Functions as a transcriptional corepressor by associating with ZHX1. Required for DUX4 silencing in somatic cells (PubMed:27153398). {ECO:0000250, ECO:0000269|PubMed:16357870, ECO:0000269|PubMed:17303076, ECO:0000269|PubMed:18413740, ECO:0000269|PubMed:18567530, ECO:0000269|PubMed:27153398}.

Molecular Weight: 95.8 kDa

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: ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from *Nicotiana tabacum* c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational

Application Details

modifications.

During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!

Restrictions: For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer. Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol Might differ depending on protein.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months