

Datasheet for ABIN3092129 DNMT3A Protein (AA 1-912) (His tag)



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1 Image

Overview

Quantity:	1 mg
Target:	DNMT3A
Protein Characteristics:	AA 1-912
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This DNMT3A protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA, Crystallization (Crys)

Product Details

Sequence:	<p>MPAMPSSGPG DTSSSAAERE EDRKDGEQE EPRGKEERQE PSTTARKVGR PGRKRKHPPV</p> <p>ESGDTPKDPA VISKSPSMAQ DSGASELLPN GDLEKRSEPQ PEEGSPAGGQ KGGAPAELEG</p> <p>AAETLPEASR AVENGCCPTK EGRGAPAEAG KEQKETNIES MKMEGSRGRL RGGLGWESSL</p> <p>RQRPMPLTF QAGDPYYISK RKRDEWLARW KREAEEKKAV IAGMNAVEEN QGPGESQKVE</p> <p>EASPPAVQQP TDPASPTVAT TPEPVGSDAG DKNATKAGDD EPEYEDGRGF GIGELVWGKL</p> <p>RGFSWWPGRI VSWWMTGRSR AAEGTRWVMW FGDGKFSVVC VEKLMPLSSF CSAFHQATYN</p> <p>KQPMYRKAIY EVLQVASSRA GKLFVCHDS DESDTAKAVE VQNKPMIEWA LGGFQPSGPK</p> <p>GLEPPEEEKN PYKEVYTMW VEPEAAAYAP PPPAKKPRKS TAEKPKVKEI IDERTRERLV</p> <p>YEVQRKCRNI EDICISGSL NVTLEHPLFV GGMCCNQCKNC FLECAQQYDD DGYQSYCTIC</p> <p>CGGREVLNMG NNNCCRCFCV ECVDLLVGPG AAQAIEDP WNCYMCCHKG TYGLLRRED</p> <p>WPSRLQMFFA NNHDQEFDP KVPVPVPAEK RKPIRVLSLF DGIATGLLVL KDLGIQVDYR</p> <p>IAEVCEDSI TVGMVRHQGK IMYVGDVRSV TQKHIQEWGP FDLVIGGSPC NDLSIVNPAR</p>
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KGLYEGTGRL FFEFYRLLHD ARPKEGDDRP FFWLFENVVA MGVSDKRDIS RFLESNPVMI
DAKEVSAHR ARYFWGNLPG MNRPLASTVN DKLELQECLE HGRIAKFSKV RTITTRSNSI
KQGKDQHFPV FMNEKEDILW CTEMERVFGF PVHYTDVSNM SRLARQRLG RSWSVPVIRH
LFAPLKEYFA CV

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 DNMT3A 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.

Product Details

Sterility:	0.22 µm filtered
Endotoxin Level:	Protein is endotoxin free.
Grade:	Crystallography grade

Target Details

Target:	DNMT3A
Alternative Name:	DNMT3A (DNMT3A 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. It modifies DNA in a non-processive manner and also methylates non-CpG sites. May preferentially methylate DNA linker between 2 nucleosomal cores and is inhibited by histone H1. Plays a role in paternal and maternal imprinting. Required for methylation of most imprinted loci in germ cells. Acts as a transcriptional corepressor for ZBTB18. Recruited to trimethylated 'Lys-36' of histone H3 (H3K36me3) sites. Can actively repress transcription through the recruitment of HDAC activity. {ECO:0000269 PubMed:16357870}.
Molecular Weight:	102.8 kDa Including tag.
UniProt:	Q9Y6K1

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

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