Datasheet for ABIN3132129

DNMT3A Protein (AA 1-908) (Strep Tag)

Go to Product page

Overview

Quantity:	250 µg
Target:	DNMT3A
Protein Characteristics:	AA 1-908
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This DNMT3A protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

Product Details

Brand:	AliCE®
Sequence:	MPSSGPGDTS SSSLEREDDR KEGEEQEENR GKEERQEPSA TARKVGRPGR KRKHPPVESS DTPKDPAVTT KSQPMAQDSG PSDLLPNGDL EKRSEPQPEE GSPAAGQKGG APAEGEGTET PPEASRAVEN GCCVTKEGRG ASAGEGKEQK QTNIESMKME GSRGRLRGGL GWESSLRQRP MPRLTFQAGD PYYISKRKRD EWLARWKREA EKKAKVIAVM NAVEENQASG ESQKVEEASP PAVQQPTDPA SPTVATTPEP VGGDAGDKNA TKAADDEPEY EDGRGFGIGE LVWGKLRGFS WWPGRIVSWW MTGRSRAAEG TRWVMWFGDG KFSVVCVEKL MPLSSFCSAF HQATYNKQPM YRKAIYEVLQ VASSRAGKLF PACHDSDESD SGKAVEVQNK QMIEWALGGF QPSGPKGLEP PEEEKNPYKE VYTDMWVEPE AAAYAPPPPA KKPRKSTTEK PKVKEIIDER TRERLVYEVR QKCRNIEDIC ISCGSLNVTL EHPLFIGGMC QNCKNCFLEC AYQYDDDGYQ SYCTICCGGR EVLMCGNNNC CRCFCVECVD LLVGPGAAQA AIKEDPWNCY MCGHKGTYGL LRRREDWPSR LQMFFANNHD QEFDPPKVYP PVPAEKRKPI RVLSLFDGIA TGLLVLKDLG IQVDRYIASE

VCEDSITVGM VRHQGKIMYV GDVRSVTQKH IQEWGPFDLV IGGSPCNDLS IVNPARKGLY EGTGRLFFEF YRLLHDARPK EGDDRPFFWL FENVVAMGVS DKRDISRFLE SNPVMIDAKE VSAAHRARYF WGNLPGMNRP LASTVNDKLE LQECLEHGRI AKFSKVRTIT TRSNSIKQGK DQHFPVFMNE KEDILWCTEM ERVFGFPVHY TDVSNMSRLA RQRLLGRSWS VPVIRHLFAP LKEYFACV

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:	DNMT3A
Alternative Name:	Dnmt3a (DNMT3A Products)
Background:	DNA (cytosine-5)-methyltransferase 3A (Dnmt3a) (EC 2.1.1.37) (Cysteine methyltransferase DNMT3A) (EC 2.1.1.-) (DNA methyltransferase MmuIIIA) (DNA MTase MmuIIIA) (M.MmuIIIA),FUNCTION: Required for genome-wide de novo methylation and is essential for the establishment of DNA methylation patterns during development (PubMed:9662389, PubMed:11399089, PubMed:10555141, PubMed:11919202, PubMed:16567415, PubMed:17713477). DNA methylation is coordinated with methylation of histones (PubMed:9662389, PubMed:11399089, PubMed:10555141, PubMed:11919202, PubMed:16567415, PubMed:17713477). It modifies DNA in a non-processive manner and also methylates non-CpG sites (PubMed:9662389, PubMed:11399089, PubMed:10555141, PubMed:11919202, PubMed:16567415, PubMed:17713477). May preferentially methylate DNA linker between 2 nucleosomal cores and is inhibited by histone H1 (PubMed:18823905). Plays a role in paternal and maternal imprinting (PubMed:15215868). Required for methylation of most imprinted loci in germ cells (PubMed:15215868). Acts as a transcriptional corepressor for ZBTB18 (PubMed:11350943). Recruited to trimethylated 'Lys-36' of histone H3 (H3K36me3) sites (PubMed:20547484). Can actively repress transcription through the recruitment of HDAC activity (PubMed:11350943). Also has weak auto-methylation activity on Cys-706 in absence of DNA (PubMed:21481189). {ECO:0000269|PubMed:10555141, ECO:0000269|PubMed:11350943, ECO:0000269|PubMed:11399089, ECO:0000269|PubMed:11919202, ECO:0000269|PubMed:15215868, ECO:0000269|PubMed:16567415, ECO:0000269|PubMed:17713477, ECO:0000269|PubMed:18823905, ECO:0000269|PubMed:20547484, ECO:0000269|PubMed:21481189, ECO:0000269|PubMed:9662389}.
Molecular Weight:	101.7 kDa
UniProt:	O88508

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 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