Datasheet for ABIN3135781

KDM3A Protein (AA 1-1323) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	KDM3A
Protein Characteristics:	AA 1-1323
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This KDM3A protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Brand:	AliCE®
Sequence:	MVLTLGESWP VLVGKRFLSL SAAEGNEGGQ DNWDLERVAE WPWLSGTIRA VSHTDVTKKD LKVCVEFDGE SWRKRRWIDV YSLQRKAFLV EHNLVLAERK SPEVPEQVIQ WPAIMYKSLL DKAGLGAITS VRFLGDQQSV FVSKDLLKPI QDVNSLRLSL TDNQTVSKEF QALIVKHLDE SHLLQGDKNL VGSEVKIYSL DPSTQWFSAT VVHGNPSSKT LQVNCEEIPA LKIVDPALIH VEVVHDNFVT CGNSTRTGAV KRKSSENNGS SVSKQAKSCS EASPSMCPVQ SVPTTVFKEI LLGCTAATPS SKDPRQQNTP QAANSPPNIG AKLPQGCHKQ NLPEELSSCL NTKPEVPRTK PDVCKEGLLS SKSSQVGAGD LKILSEPKGS CIQPKTNTDQ ESRLESAPQP VTGLPKECLP AKTSSKAELD IATTPELQKH LEHAASTSDD LSDKPEVKAG VTSLNSCAEK KVEPSHLGSQ SQNLKETSVK VDNESCCTRS SNKTQTPPAR KSVLTDPDKV RKLQQSGEAF VQDDSCVNIV AQLPKCRECR LDSLRKDKDQ QKDSPVFCRF FHFRRLQFNK HGVLRVEGFL TPNKYDSEAI GLWLPLTKNV VGTDLDTAKY ILANIGDHFC QMVISEKEAM STIEPHRQVA WKRAVKGVRE

MCDVCDTTIF NLHWVCPRCG FGVCVDCYRM KRKNCQQGAA YKTFSWIRCV KSQIHEPENL MPTQIIPGKA LYDVGDIVHS VRAKWGIKAN CPCSNRQFKL FSKPALKEDL KQTSLSGEKP TLGTMVQQSS PVLEPVAVCG EAASKPASSV KPTCPTSTSP LNWLADLTSG NVNKENKEKQ LTMPILKNEI KCLPPLPPLN KPSTVLHTFN STILTPVSNN NSGFLRNLLN SSTAKTENGL KNTPKILDDI FASLVQNKTS SDSSKRPQGL TIKPSILGFD TPHYWLCDNR LLCLQDPNNK SNWNVFRECW KQGQPVMVSG VHHKLNTELW KPESFRKEFG EQEVDLVNCR TNEIITGATV GDFWDGFEDV PNRLKNDKEK EPMVLKLKDW PPGEDFRDMM PSRFDDLMAN IPLPEYTRRD GKLNLASRLP NYFVRPDLGP KMYNAYGLIT PEDRKYGTTN LHLDVSDAAN VMVYVGIPKG QCEQEEEVLR TIQDGDSDEL TIKRFIEGKE KPGALWHIYA AKDTEKIREF LKKVSEEQGQ DNPADHDPIH DQSWYLDRSL RKRLYQEYGV QGWAIVQFLG DVVFIPAGAP HQVHNLYSCI KVAEDFVSPE HVKHCFWLTQ EFRYLSQTHT NHEDKLQVKN VIYHAVKDAV AMLKASESSL GKP

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 -

Product Details

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.

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:	KDM3A
Alternative Name:	Kdm3a (KDM3A Products)
Background:	Lysine-specific demethylase 3A (EC 1.14.11.65) (JmjC domain-containing histone demethylation protein 2A) (Jumonji domain-containing protein 1A) ([histone H3]-dimethyl-L-lysine(9) demethylase 3A),FUNCTION: Histone demethylase that specifically demethylates 'Lys-9' of histone H3, thereby playing a central role in histone code. Preferentially demethylates mono- and dimethylated H3 'Lys-9' residue, with a preference for dimethylated residue, while it has weak or no activity on trimethylated H3 'Lys-9'. Demethylation of Lys residue generates formaldehyde and succinate. Involved in hormone-dependent transcriptional activation, by participating in recruitment to androgen-receptor target genes, resulting in H3 'Lys-9' demethylation and transcriptional activation (By similarity). Involved in spermatogenesis by regulating expression of target genes such as PRM1 and TNP1 which are required for packaging and condensation of sperm chromatin (PubMed:17943087). Involved in obesity resistance through regulation of metabolic genes such as PPARA and UCP1. {ECO:0000250, ECO:0000269|PubMed:17943087, ECO:0000269|PubMed:19194461}.
Molecular Weight:	147.8 kDa
UniProt:	Q6PCM1
Pathways:	Intracellular Steroid Hormone Receptor Signaling Pathway, Nuclear Hormone Receptor Binding, Warburg Effect

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