

Datasheet for ABIN3134565

KDM2A Protein (AA 1-1161) (Strep Tag)



Overview

Quantity:	250 μg
Target:	KDM2A
Protein Characteristics:	AA 1-1161
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This KDM2A protein is labelled with Strep Tag.
Application:	Western Blotting (WB), ELISA, SDS-PAGE (SDS)

Product Details	
Brand:	AliCE®
Sequence:	MEPEEERIRY SQRLRGTMRR RYEDDGISDD EIEGKRTFDL EEKLQTNKYN ANFVTFMEGK
	DFNVEYIQRG GLRDPLIFKN SDGLGIKMPD PDFTVNDVKM CVGSRRMVDV MDVNTQKGIE
	MTMAQWTRYY ETPEEEREKL YNVISLEFSH TRLENMVQWP STVDFIDWVD NMWPRHLKES
	QTESTNAILE MQYPKVQKYC LISVRGCYTD FHVDFGGTSV WYHIHQGGKV FWLIPPTAHN
	LELYENWLLS GKQGDIFLGD RVSDCQRIEL KQGYTFVIPS GWIHAVYTPT DTLVFGGNFL
	HSFNIPMQLK IYSIEDRTRV PNKFRYPFYY EMCWYVLERY VYCITNRSHL TKDFQKESLS
	MDMELNELES GNGDEEGVDR EARRMNNKRS VLTSPVANGV NLDYDGLGKA CRSLPSLKKT
	LSGDSSSDST RGSHNGQVWD PQCSPKKDRQ VHLTHFELEG LRCLVDKLES LPLHKKCVPT
	GIEDEDALIA DVKILLEELA SSDPKLALTG VPIVQWPKRD KLKFPTRPKV RVPTIPITKP
	HTMKPAPRLT PVRPAAASPI VSGARRRRVR CRKCKACVQG ECGVCHYCRD MKKFGGPGRM
	KQSCVLRQCL APRLPHSVTC SLCGEVDQNE ETQDFEKKLM ECCICNEIVH PGCLQMDGEG

LLNEELPNCW ECPKCYQEDS SDKAQKRKIE ESDEEAVQAK VLRPLRSCEE PLTPPPHSPT
SMLQLIHDPV SPRGMVTRSS PGAGPSDHHS ASRDERFKRR QLLRLQATER TMVREKENNP
SGKKELSEVE KAKIRGSYLT VTLQRPTKEL HGTSIVPKLQ AITASSANLR PNPRVLMQHC
PARNPQHGDE EGLGGEEEEE EEEEEDDSAE EGGAARLNGR GSWAQDGDES WMQREVWMSV
FRYLSRKELC ECMRVCKTWY KWCCDKRLWT KIDLSRCKAI VPQALSGIIK RQPVSLDLSW
TNISKKQLTW LVNRLPGLKD LLLAGCSWSA VSALSTSSCP LLRTLDLRWA VGIKDPQIRD
LLTPPTDKPG QDNRSKLRNM TDFRLAGLDI TDATLRLIIR HMPLLSRLDL SHCSHLTDQS
SNLLTAVGSS TRYSLTELNM AGCNKLTDQT LFFLRRIANV TLIDLRGCKQ ITRKACEHFI
SDLSINSLYC LSDEKLIOKI S

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 posttranslational 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.

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:

KDM2A

Alternative Name:

Kdm2a (KDM2A Products)

Background:

Lysine-specific demethylase 2A (EC 1.14.11.27) (F-box and leucine-rich repeat protein 11) (F-box/LRR-repeat protein 11) (JmjC domain-containing histone demethylation protein 1A) ([Histone-H3]-lysine-36 demethylase 1A),FUNCTION: Histone demethylase that specifically demethylates 'Lys-36' of histone H3, thereby playing a central role in histone code (PubMed:32584788). Preferentially demethylates dimethylated H3 'Lys-36' residue while it has weak or no activity for mono- and tri-methylated H3 'Lys-36'. May also recognize and bind to some phosphorylated proteins and promote their ubiquitination and degradation. Required to maintain the heterochromatic state. Associates with centromeres and represses transcription of small non-coding RNAs that are encoded by the clusters of satellite repeats at the centromere. Required to sustain centromeric integrity and genomic stability, particularly during mitosis (By similarity). Regulates circadian gene expression by repressing the transcriptional activator activity of CLOCK-BMAL1 heterodimer and RORA in a catalytically-independent manner (By similarity). {ECO:0000250|UniProtKB:Q9Y2K7, ECO:0000269|PubMed:32584788}.

Molecular Weight:

132.7 kDa

UniProt:

P59997

Pathways:

Warburg Effect

Application Details

Application Notes:

In addition to the applications listed above we expect the protein to work for functional studies

Application Details

- Application Betaile	
	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