

Datasheet for ABIN3093402

KDM2A Protein (AA 1-1162) (Strep Tag)



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Overview

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| Quantity: | 250 µg |
| Target: | KDM2A |
| Protein Characteristics: | AA 1-1162 |
| Origin: | Human |
| 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: | <p>MEPEEERIRY SQRLRGTMRR RYEDDGISDD EIEGKRTFDL EEKLHTNKYN ANFVTFMEGK</p> <p>DFNVEYIQRG GLRDPLIFKN SDGLGIKMPD PDFTVNDVKM CVGSRRMVDV MDVNTQKGIE</p> <p>MTMAQWTRY YETPEEEREKL YNVISLEFSH TRLENMVQRP STVDFIDWVD NMWPRHLKES</p> <p>QTESTNAILE MQYPKVQKYC LMSVRGCYTD FHVDFGGTSV WYHIHQGGKV FWLIPPTAHN</p> <p>LELYENWLLS GKQGDIFLGD RVSDCQRIEL KQGYTFVIPS GWIHAVYTPT DTLVFGGNFL</p> <p>HSFNIPMLK IYNIEDRTRV PNKFRYPFY EMCWVVLERY VYCITNRSHL TKEFQKESLS</p> <p>MDLELNGLES GNGDEEAVDR EPRRLSSRRS VLTSPVANGV NLDYDGLGKT CRSPLSLKKT</p> <p>LAGDSSSDCS RGSNGQVWD PQCAPRKDRQ VHLTHFELEG LRCLVDKLES LPLHKKCVPT</p> <p>GIEDEDALIA DVKILLEELA NSDPKLALTG VPIVQWPKRD KLKFPTRPKV RVPTIPITKP</p> <p>HTMKPAPRLT PVRPAAASPI VSGARRRRVR CRKCKACVQG ECGVCHYCRD MKKFGGPGRM</p> <p>KQSCVLRQCL APRLPHSVTC SLCGEVDQNE ETQDFEKKLM ECCICNEIVH PGCLQMDGEG</p> |

LLNEELPNCW ECPKCYQEDS SEKAQKRKME ESDEEAVQAK VLRPLRSCDE PLTPPPHSPT
SMLQLIHDPV SPRGMVTRSS PGAGPSDHHS ASRDERFKRR QLLRLQATER TMVREKENNP
SGKKELSEVE KAKIRGSYLT VTLQRPTKEL HGTSIVPKLQ AITASSANLR HSPRVLVQHC
PARTPQRGDE EGLGEEEEEE EEEEEEDDSA EEGGAARLNG RGSWAQDGDE SWMQREVWMS
VFRYLSRREL CECMRVCKTW YKWCCDKRLW TKIDLSRCKA IVPQALSGII KRQPVSLDLS
WTNISKKQLT WLVNRLPGLK DLLLAGCSWS AVSALSTSSC PLLRTLDLRW AVGIKDPQIR
DLLTPPADKP GQDNRSKLRN MTDRLAGLD ITDATLRLII RHMPLLSRDL LSHCSHLTDQ
SSNLLTAVGS STRYSLTELN MAGCNKLTQ TLIYLRRIAN VTLIDLRGCK QITRKACEHF
ISDLSINSLY CLSDEKLIQK IS

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!

Product Details

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) (CXXC-type zinc finger protein 8) (F-box and leucine-rich repeat protein 11) (F-box protein FBL7) (F-box protein Lilina) (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. 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. Regulates circadian gene expression by repressing the transcriptional activator activity of CLOCK-BMAL1 heterodimer and RORA in a catalytically-independent manner (PubMed:26037310). {ECO:0000269|PubMed:16362057, ECO:0000269|PubMed:19001877, ECO:0000269|PubMed:26037310, ECO:0000269|PubMed:28262558}.

Molecular Weight: 132.8 kDa

UniProt: [Q9Y2K7](#)

Pathways: [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