Datasheet for ABIN3093320

KDM1B Protein (AA 1-822) (Strep Tag)

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Overview

Quantity:	1 mg
Target:	KDM1B
Protein Characteristics:	AA 1-822
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This KDM1B protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Sequence:	MATPRGRTKK KASFDHSPDS LPLRSSGRQA KKKATETTDE DEDGGSEKKY RKCEKAGCTA TCPVCFASAS ERCAKNGYTS RWYHLSCGEH FCNECFDHYY RSHKDGYDKY TTWKKIWTSN GKTEPSPKAF MADQQLPYWV QCTKPECRKW RQLTKEIQLT PQIAKTYRCG MKPNTAIKPE TSDHCSLPED LRVLEVSNHW WYSMLILPPL LKDSVAAPLL SAYYPDCVGM SPSCTSTNRA AATGNASPGK LEHSKAALSV HVPGMNRYFQ PFYQPNECGK ALCVRPDVME LDELYEFPEY SRDPTMYLAL RNLILALWYT NCKEALTPQK CIPHIIVRGL VRIRCVQEVE RILYFMTRKG LINTGVLSVG ADQYLLPKDY HNKSVIIIGA GPAGLAAARQ LHNFGIKVTV LEAKDRIGGR VWDDKSFKGV TVGRGAQIVN GCINNPVALM CEQLGISMHK FGERCDLIQE GGRITDPTID KRMDFHFNAL LDVVSEWRKD KTQLQDVPLG EKIEEIYKAF IKESGIQFSE LEGQVLQFHL SNLEYACGSN LHQVSARSWD HNEFFAQFAG DHTLLTPGYS VIIEKLAEGL DIQLKSPVQC IDYSGDEVQV TTTDGTGYSA QKVLVTVPLA LLQKGAIQFN PPLSEKKMKA INSLGAGIIE KIALQFPYRF WDSKVQGADF FGHVPPSASK RGLFAVFYDM DPQKKHSVLM SVIAGEAVAS

VRTLDDKQVL QQCMATLREL FKEQEVPDPT KYFVTRWSTD PWIQMAYSFV KTGGSGEAYD IIAEDIQGTV FFAGEATNRH FPQTVTGAYL SGVREASKIA AF

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 by multi-step, protein-specific process to ensure correct folding and modification.
- 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 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.

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 in several dilutions and is measured against its specific reference buffer.
- We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.

Product Details

Purification:	Two step purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®): 1. In a first purification step, the protein is purified from the cleared cell lysate using StrepTag capture material. 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:	>80 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Endotoxin Level:	Low Endotoxin less than 1 EU/mg (< 0.1 ng/mg)

Target Details

Target:	KDM1B
Alternative Name:	KDM1B (KDM1B Products)
Background:	Lysine-specific histone demethylase 2 (EC 1.14.99.66) (Flavin-containing amine oxidase domain-containing protein 1) (Lysine-specific histone demethylase 1B),FUNCTION: Histone demethylase that demethylates 'Lys-4' of histone H3, a specific tag for epigenetic transcriptional activation, thereby acting as a corepressor. Required for de novo DNA methylation of a subset of imprinted genes during oogenesis. Acts by oxidizing the substrate by FAD to generate the corresponding imine that is subsequently hydrolyzed. Demethylates both mono- and di-methylated 'Lys-4' of histone H3. Has no effect on tri-methylated 'Lys-4', mono-, di- or tri-methylated 'Lys-9', mono-, di- or tri-methylated 'Lys-27', mono-, di- or tri-methylated 'Lys-36' of histone H3, or on mono-, di- or tri-methylated 'Lys-20' of histone H4. Alone, it is unable to demethylate H3K4me on nucleosomes and requires the presence of GLYR1 to achieve such activity, they form a multifunctional enzyme complex that modifies transcribed chromatin and facilitates Pol II transcription through nucleosomes (PubMed:30970244). {ECO:0000269|PubMed:23260659, ECO:0000269|PubMed:23357850, ECO:0000269|PubMed:30970244}.
Molecular Weight:	92.1 kDa
UniProt:	Q8NB78
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

	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. If you have a special request, please contact us.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)

