Datasheet for ABIN3093321

KDM4B Protein (AA 1-1096) (Strep Tag)

1 Image

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Overview

Quantity:	1 mg
Target:	KDM4B
Protein Characteristics:	AA 1-1096
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This KDM4B protein is labelled with Strep Tag.
Application:	Western Blotting (WB), ELISA, SDS-PAGE (SDS)

Product Details

Sequence:	MGSEDHGAQN PSCKIMTFRP TMEEFKDFNK YVAYIESQGA HRAGLAKIIP PKEWKPRQTY DDIDDVVIPA PIQQVVTGQS GLFTQYNIQK KAMTVGEYRR LANSEKYCTP RHQDFDDLER KYWKNLTFVS PIYGADISGS LYDDDVAQWN IGSLRTILDM VERECGTIIE GVNTPYLYFG MWKTTFAWHT EDMDLYSINY LHFGEPKSWY AIPPEHGKRL ERLAIGFFPG SSQGCDAFLR HKMTLISPII LKKYGIPFSR ITQEAGEFMI TFPYGYHAGF NHGFNCAEST NFATLRWIDY GKVATQCTCR KDMVKISMDV FVRILQPERY ELWKQGKDLT VLDHTRPTAL TSPELSSWSA SRASLKAKLL RRSHRKRSQP KKPKPEDPKF PGEGTAGAAL LEEAGGSVKE EAGPEVDPEE EEEEPQPLPH GREAEGAEED GRGKLRPTKA KSERKKKSFG LLPPQLPPPP AHFPSEEALW LPSPLEPPVL GPGPAAMEES PLPAPLNVVP PEVPSEELEA KPRPIIPMLY VVPRPGKAAF NQEHVSCQQA FEHFAQKGPT WKEPVSPMEL TGPEDGAASS GAGRMETKAR AGEGQAPSTF SKLKMEIKKS RRHPLGRPPT RSPLSVVKQE ASSDEEASPF SGEEDVSDPD ALRPLLSLQW KNRAASFQAE RKFNAAAART EPYCAICTLF YPYCQALQTE KEAPIASLGK GCPATLPSKS

RQKTRPLIPE MCFTSGGENT EPLPANSYIG DDGTSPLIAC GKCCLQVHAS CYGIRPELVN EGWTCSRCAA HAWTAECCLC NLRGGALQMT TDRRWIHVIC AIAVPEARFL NVIERHPVDI SAIPEQRWKL KCVYCRKRMK KVSGACIQCS YEHCSTSFHV TCAHAAGVLM EPDDWPYVVS ITCLKHKSGG HAVQLLRAVS LGQVVITKNR NGLYYRCRVI GAASQTCYEV NFDDGSYSDN LYPESITSRD CVQLGPPSEG ELVELRWTDG NLYKAKFISS VTSHIYQVEF EDGSQLTVKR GDIFTLEEEL PKRVRSRLSL STGAPQEPAF SGEEAKAAKR PRVGTPLATE DSGRSQDYVA FVESLLQVQG RPGAPF

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:

Product Details

- 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.

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)
Grade:	Crystallography grade

Target Details

Target:	KDM4B
Alternative Name:	KDM4B (KDM4B Products)
Background:	Lysine-specific demethylase 4B (EC 1.14.11.66) (JmjC domain-containing histone demethylation protein 3B) (Jumonji domain-containing protein 2B) ([histone H3]-trimethyl-L-lysine(9) demethylase 4B),FUNCTION: Histone demethylase that specifically demethylates 'Lys-9' of histone H3, thereby playing a role in histone code. Does not demethylate histone H3 'Lys-4', H3 'Lys-27', H3 'Lys-36' nor H4 'Lys-20'. Only able to demethylate trimethylated H3 'Lys-9', with a weaker activity than KDM4A, KDM4C and KDM4D. Demethylation of Lys residue generates formaldehyde and succinate (PubMed:16603238, PubMed:28262558). Plays a critical role in the development of the central nervous system (CNS). {ECO:0000250|UniProtKB:Q91VY5, ECO:0000269|PubMed:16603238, ECO:0000269|PubMed:28262558}.
Molecular Weight:	121.9 kDa
UniProt:	O94953
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. 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)

Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process