Datasheet for ABIN3093348

KDM4A Protein (AA 2-1064) (His tag)

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Overview

Quantity:	1 mg
Target:	KDM4A
Protein Characteristics:	AA 2-1064
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This KDM4A protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA, Crystallization (Crys)

Product Details

Sequence:	ASESETLNPS ARIMTFYPTM EEFRNFSRYI AYIESQGAHR AGLAKVVPPK EWKPRASYDD IDDLVIPAPI QQLVTGQSGL FTQYNIQKKA MTVREFRKIA NSDKYCTPRY SEFEELERKY WKNLTFNPPI YGADVNGTLY EKHVDEWNIG RLRTILDLVE KESGITIEGV NTPYLYFGMW KTSFAWHTED MDLYSINYLH FGEPKSWYSV PPEHGKRLER LAKGFFPGSA QSCEAFLRHK MTLISPLMLK KYGIPFDKVT QEAGEFMITF PYGYHAGFNH GFNCAESTNF ATRRWIEYGK QAVLCSCRKD MVKISMDVFV RKFQPERYKL WKAGKDNTVI DHTLPTPEAA EFLKESELPP RAGNEEECPE EDMEGVEDGE EGDLKTSLAK HRIGTKRHRV CLEIPQEVSQ SELFPKEDLS SEQYEMTECP AALAPVRPTH SSVRQVEDGL TFPDYSDSTE VKFEELKNVK LEEEDEEEEQ AAAALDLSVN PASVGGRLVF SGSKKKSSSS LGSGSSRDSI SSDSETSEPL SCRAQGQTGV LTVHSYAKGD GRVTVGEPCT RKKGSAARSF SERELAEVAD EYMFSLEENK KSKGRRQPLS KLPRHHPLVL QECVSDDETS EQLTPEEEAE ETEAWAKPLS QLWQNRPPNF EAEKEFNETM AQQAPHCAVC MIFQTYHQVE FGGFNQNCGN ASDLAPQKQR TKPLIPEMCF TSTGCSTDIN

	LSTPYLEEDG TSILVSCKKC SVRVHASCYG VPPAKASEDW MCSRCSANAL EEDCCLCSLR GGALQRANDD RWVHVSCAVA ILEARFVNIA ERSPVDVSKI PLPRFKLKCI FCKKRRKRTA GCCVQCSHGR CPTAFHVSCA QAAGVMMQPD DWPFVVFITC FRHKIPNLER AKGALQSITA GQKVISKHKN GRFYQCEVVR LTTETFYEVN FDDGSFSDNL YPEDIVSQDC LQFGPPAEGE VVQVRWTDGQ VYGAKFVASH PIQMYQVEFE DGSQLVVKRD DVYTLDEELP KRVKSRLSVA SDMRFNEIFT EKEVKQEKKR QRVINSRYRE DYIEPALYRA IME **Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.**
Characteristics:	• Made in Germany - from design to production - by highly experienced protein experts. • Human KDM4A Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade. • 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. In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization). When you order this made-to-order protein you will only pay upon receival of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered. 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. The concentration of the protein is calculated using its specific absorption coefficient. We use the Expasy's protparam tool to determine the absorption coefficient of each protein.
Purification:	Two step purification of proteins expressed in baculovirus infected SF9 insect cells: 1. In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. 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.

Product Details

Purity:	>95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Sterility:	0.22 µm filtered
Endotoxin Level:	Protein is endotoxin free.
Grade:	Crystallography grade

Target Details

Target:	KDM4A
Alternative Name:	KDM4A (KDM4A Products)
Background:	Histone demethylase that specifically demethylates 'Lys-9' and 'Lys-36' residues of histone H3, thereby playing a central role in histone code. Does not demethylate histone H3 'Lys-4', H3 'Lys-27' nor H4 'Lys-20'. Demethylates trimethylated H3 'Lys-9' and H3 'Lys-36' residue, while it has no activity on mono- and dimethylated residues. Demethylation of Lys residue generates formaldehyde and succinate. Participates in transcriptional repression of ASCL2 and E2F-responsive promoters via the recruitment of histone deacetylases and NCOR1, respectively., Isoform 2: Crucial for muscle differentiation, promotes transcriptional activation of the Myog gene by directing the removal of repressive chromatin marks at its promoter. Lacks the N-terminal demethylase domain.
Molecular Weight:	121.5 kDa Including tag.
UniProt:	O75164
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 gurantee though.
Comment:	In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you receive your protein of interest.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)