

Datasheet for ABIN3093405  
**KDM6A Protein (AA 1-1401) (Strep Tag)**[Go to Product page](#)

## 1 Image

## Overview

Quantity:	1 mg
Target:	KDM6A
Protein Characteristics:	AA 1-1401
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This KDM6A protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

## Product Details

Sequence:	MKSCGVSLAT AAAAAAAGFD EEKKMAAGKA SGSEEEASPS LTAEEREALG GLDSRLFGFV RFHEDGARTK ALLGKAVRCY ESLILKAEGK VESDFFCQLG HFNLLLEDYP KALSAYQRYR SLQSDYWKNA AFLYGLGLVY FHYNFQWAI KAFQEVLYVD PSFCRAKEIH LRLGLMFKVN TDYESSLKHF QLALVDCNPC TLSNAEIQFH IAHLYETQRK YHSAKEAYEQ LLQTENLSAQ VKATVLQQLG WMHHTVDLLG DKATKESYAI QYLQKSLEAD PNSGQSWYFL GRCYSSIGKV QDAFISYRQS IDKSEASADT WCSIGVLYQQ QNQPM DALQA YICAVQLDHG HAAAWMDLGT LYESCNQPQD AIKCYLNATR SKSCSNTSAL AARIKYLQAQ LCNLPQGSLQ NKTLLPSIE EAWSLPIPAE LTSRQGAMNT AQQNTSDNWS GGHAVSHPPV QQQAHSWCLT PQKLQHLEQL RANRNNLNPA QKLMLEQLES QFVLMQQHQ M RPTGVAQVRS TGIPNGPTAD SSLPTNSVSG QQPQLALTRV PSVSQPGVRP ACPGQPLANG PFSAGHVPCS TSRTLGSTDT ILIGNNHITG SGSNGNVPYL QRNALTLPHN RTNLTSSAEE PWKNQLSNST QGLHKGQSSH SAGPNGERPL SSTGPSQHLQ AAGSGIQNQ GHPTLPSNSV TQGAALNHL SHTATSGGQQ GITLTKEKSP
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SGNILTVPET SRHTGETPNS TASVEGLPNH VHQMTADAVC SPSHGDSKSP GLLSSDNPQL  
SALLMGKANN NVGTGTCDKV NNIHPAVHTK TDNSVASSPS SAISTATPSP KSTEQTTTNS  
VTSLNPHSG LHTINGEGME ESQSPMKTDL LLVNHKPSQ IIPSMSVSIY PSSAEVLKAC  
RNLGKNGLSN SSILLDKCPP PRPPSSPYPP LPKDKLNPPT PSYLENKRD AFFPPLHQFC  
TNPNNPVTVI RGLAGALKLD LGLFSTKTLV EANNEHMOVEV RTQLLQPADE NWDPTGTKKI  
WHCESNRSH TIAKYAQYQA SSFQESLREE NEKRSHHKDH SDSESTSSDN SGRRRKGPFK  
TIKFGTNIDL SDDKKWKLQL HELTKLPAFV RVVSAGNLLS HVGHTILGMN TVQLYMKVPG  
SRTPGHQENN NFCSVNINIG PGDCEWFVVP EGYWGVNLDF CEKNNLNFLM GSWWPNLDEL  
YEANVPVYRF IQRPGDLVWI NAGTVHWVQA IGWCNNIAWN VGPLTACQYK LAVERYEWNK  
LQSVKSIVPM VHLSWNMARN IKVSDPKLFE MIKYCLLRTL KQCQTLREAL IAAGKEIWH  
GRTKEEPAHY CSICEVEVFD LLFVTNESNS RKTYIVHCQD CARKTSGNLE NFVVLEQYKM  
EDLMQVYDQF TLAPPLPSAS 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.**

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### 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

## Product Details

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.

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:	KDM6A
Alternative Name:	KDM6A ( <a href="#">KDM6A Products</a> )
Background:	Lysine-specific demethylase 6A (EC 1.14.11.68) (Histone demethylase UTX) (Ubiquitously-transcribed TPR protein on the X chromosome) (Ubiquitously-transcribed X chromosome tetratricopeptide repeat protein) ([histone H3]-trimethyl-L-lysine(27) demethylase 6A),FUNCTION: Histone demethylase that specifically demethylates 'Lys-27' of histone H3, thereby playing a central role in histone code (PubMed:17851529, PubMed:17713478, PubMed:17761849). Demethylates trimethylated and dimethylated but not monomethylated H3 'Lys-27' (PubMed:17851529, PubMed:17713478, PubMed:17761849). Plays a central role in regulation of posterior development, by regulating HOX gene expression (PubMed:17851529). Demethylation of 'Lys-27' of histone H3 is concomitant with methylation of 'Lys-4' of histone H3, and regulates the recruitment of the PRC1 complex and monoubiquitination of histone H2A

## Target Details

(PubMed:17761849). Plays a demethylase-independent role in chromatin remodeling to regulate T-box family member-dependent gene expression (By similarity).  
{ECO:0000250|UniProtKB:O70546, ECO:0000269|PubMed:17713478, ECO:0000269|PubMed:17761849, ECO:0000269|PubMed:17851529, ECO:0000269|PubMed:18003914}.

Molecular Weight: 154.2 kDa

UniProt: [O15550](#)

Pathways: [Tube Formation, 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.

## Handling

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Expiry Date: Unlimited (if stored properly)

## Images

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