

Product datasheet

Recombinant human KDM2A protein (Active)
ab271507

2 Images

Description

Product name	Recombinant human KDM2A protein (Active)	
Biological activity	Specific Activity: 0.01 pmole/min/µg.	
Purity	>= 80 % SDS-PAGE. Affinity purified.	
Expression system	Baculovirus infected Sf9 cells	
Accession	Q9Y2K7	
Protein length	Protein fragment	
Animal free	No	
Nature	Recombinant	
Species	Human	
Sequence	EPEEERIRYSQRLRGTMRRRYEDDGISDDEIEGKRTFDLEE KLHTNKYNA NFVTFMEGKDFNVEYQRGGLRDPLIFKNSDGLGIKMPDP DFTVNDVKMC VGSRRMVDVMDVNTQKGIEMTMAQWTRYETPEEEREKL YNVISLEFSHT RLENMVQRPSTVDFIDWVDNMWPRHLKESQTESTNAILE MQYPKVQKYCL MSVRGCYTDFHVDFFGGTSVWYHIHQGGKVFWLIPPTAHN LELYENWLLSG KQGDIFLGDRVSDCQRIELKQGYTFVIPSGWIHAVYPTDT LVFGGNFLH SFNIPMLKINIEDRTRVPNKFYFPFYEMCWVYLERVY CITNRSHLT KEFQKESLSMDLELNGLESGNGDEEAVDREPRRLSSRR SVLTSPVANGVN LDYDGLGKTCRSLPSLKKTLAGDSSSDCSRSHNGQVW DPQCAPRKDRQV HLTHFELEGLRCLVDKLESPLHKKCVPTGIEDEDALIADV KILLEELAN SDPKLALTGVPIVQWPKRDKLFPTRPKVRVPTIPITKPHT MKPAPRLTP	

VRPAAASPVSGARRRRVRCRKCKACVQGECGVCHYCR
DMKKFGGPGRMK
QSCVLRQCLAPRLPHSVTCSLCGEVDQNEETQDFEKKL
MECCICNEVHP
GCLQMDGEGLLNEELPNCWECPKCYQEDSSEKAQKRK
MEESDEEAVQAK

Predicted molecular weight	82 kDa
Amino acids	2 to 700
Tags	DDDDK tag N-Terminus , Avi tag N-Terminus

Specifications

Our [Abpromise guarantee](#) covers the use of **ab271507** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	Functional Studies SDS-PAGE
Form	Liquid

Preparation and Storage

Stability and Storage	Shipped on Dry Ice. Store at -80°C. Avoid freeze / thaw cycle. pH: 8.00 Constituents: 0.63% Tris HCl, 0.64% Sodium chloride, 0.02% Potassium chloride, 0.04% Tween, 20% Glycerol (glycerin, glycerine) 80 µg/ml DDDDK peptide This product is an active protein and may elicit a biological response in vivo, handle with caution.
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General Info

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.
Tissue specificity	Widely expressed, with highest levels in brain, testis and ovary, followed by lung.
Sequence similarities	Belongs to the JHDM1 histone demethylase family. Contains 1 CXXC-type zinc finger. Contains 1 F-box domain. Contains 1 JmjC domain. Contains 6 LRR (leucine-rich) repeats. Contains 1 PHD-type zinc finger.
Domain	The JmjC domain mediates demethylation activity and is required for satellite silencing. The CXXC zinc finger preferentially recognizes nonmethylated CpG DNA, and binding is blocked

when the CpG DNA is methylated.

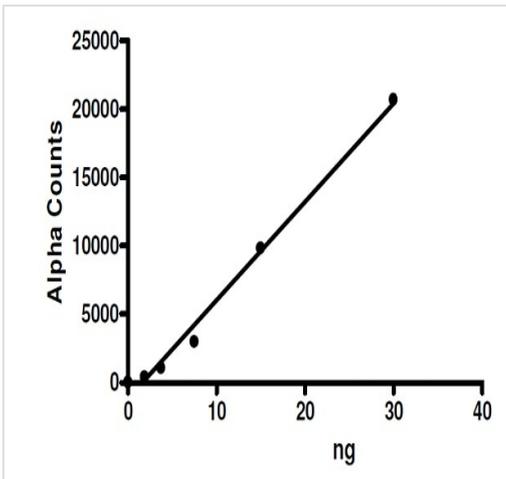
Post-translational modifications

Phosphorylated upon DNA damage, probably by ATM or ATR.

Cellular localization

Nucleus > nucleoplasm. Punctate expression throughout the nucleoplasm and enriched in the perinucleolar region. Specifically nucleates at CpG islands where it's presence results in chromatin depleted in H3K36me2.

Images



Specific activity of ab271507.

Functional Studies - Recombinant human KDM2A protein (Active) (ab271507)



SDS-PAGE analysis of 3.9 µg ab271507.

SDS-PAGE - Recombinant human KDM2A protein (Active) (ab271507)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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