

Product datasheet for **TP510741**

Kdm1a (NM_133872) Mouse Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Mouse lysine (K)-specific demethylase 1A (Kdm1a), with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug
Species:	Mouse
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>MR210741 representing NM_133872 Red =Cloning site Green =Tags(s)

MATGAAGERTPRKKEPPRASPPGGLAEPGSGAGPQAGPTAGPGSATPMETGIAETPEGRRTSRRKRAKVE
YREMDESLANLSEDEYYSEEERNAKAEKEKKLPPPPQAPPEEENESEPEEPSGVEGAAFQSRPHDRMT
SQEAACFPDIISGPQQTQKVFLFIRNRTLQLWLDNSKIQLTFEATLQQLEAPYNSDVLVHRVHSYLERH
GLINFGIYKRIKPLPIKKTGKVIIGSGVSLGAAARQLQSFQMDVTLLEARDRVGGRVATFRKGNVADL
GAMVVTGLGGNPMVAVVSKQVNMELAKIKQKCLYEANGQAVPKEKDEMVEQEFNRLLEATSYLSHQDFN
VLNKNPVS LGQALEVVIQLQEKHVKDEQIEHWKKIVKTQEELKELLNKMNVLKEKIKELHQYKEASEVK
PPRDITAEFLVSKHRDLTALCKEYDELAETQGKLEELQEEANPPSDVYLSSRDRQILDWHFANLEFA
NATPLSTLSLKHWDQDDDFEFTGSHLTVRNGYSCVPVALAEGLDIKLNTAVRQVRYTASGCEVIAVNTRS
TSQTFIYKCAVLCPLGLKQPPAVQFVPLPEWKTSAVQRMGFGNLNKVLCFDRVFWDPVSNLFG
HVGSTTASRGELFLFWNLYKAPILLALVAGEAAGIMENISDDVIVGRCLAILKGIFGSSAVPQPKETVVS
RWRADPWARGSYSVAAGSSGNDYDLMAQPITPGPSIPGAPQPIPRLFFAGEHTIRNYPATVHGALLSGL
REAGRIADQFLGAMYTLPRQATPGVPAQQSPSM

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag:	C-MYC/DDK
Predicted MW:	93.3 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C after receiving vials.



[View online »](#)

Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	NP_598633
Locus ID:	99982
UniProt ID:	Q6ZQ88
RefSeq Size:	2999
Cytogenetics:	4 68.8 cM
RefSeq ORF:	2409
Synonyms:	1810043O07Rik; AA408884; Aof2; D4Ert478e; Kdm1; Lsd1; mKIAA0601
Summary:	<p>Histone demethylase that can demethylate both 'Lys-4' (H3K4me) and 'Lys-9' (H3K9me) of histone H3, thereby acting as a coactivator or a corepressor, depending on the context. Acts by oxidizing the substrate by FAD to generate the corresponding imine that is subsequently hydrolyzed. Acts as a corepressor by mediating demethylation of H3K4me, a specific tag for epigenetic transcriptional activation. Demethylates both mono- (H3K4me1) and di-methylated (H3K4me2) H3K4me. May play a role in the repression of neuronal genes. Alone, it is unable to demethylate H3K4me on nucleosomes and requires the presence of RCOR1/CoREST to achieve such activity. Also acts as a coactivator of androgen receptor (ANDR)-dependent transcription, by being recruited to ANDR target genes and mediating demethylation of H3K9me, a specific tag for epigenetic transcriptional repression. The presence of PRKCB in ANDR-containing complexes, which mediates phosphorylation of 'Thr-6' of histone H3 (H3T6ph), a specific tag that prevents demethylation H3K4me, prevents H3K4me demethylase activity of KDM1A. Demethylates di-methylated 'Lys-370' of p53/TP53 which prevents interaction of p53/TP53 with TP53BP1 and represses p53/TP53-mediated transcriptional activation (By similarity). Demethylates and stabilizes the DNA methylase DNMT1. Required for gastrulation during embryogenesis. Component of a RCOR/GFI/KDM1A/HDAC complex that suppresses, via histone deacetylase (HDAC) recruitment, a number of genes implicated in multilineage blood cell development. Effector of SNAI1-mediated transcription repression of E-cadherin/CDH1, CDN7 and KRT8. Required for the maintenance of the silenced state of the SNAI1 target genes E-cadherin/CDH1 and CDN7.[UniProtKB/Swiss-Prot Function]</p>