

Product datasheet for TP506539

Kdm8 (NM_029842) Mouse Recombinant Protein

Product data:

OriGene Technologies, Inc.

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Recombinant Proteins
Purified recombinant protein of Mouse lysine (K)-specific demethylase 8 (Kdm8), with C- terminal MYC/DDK tag, expressed in HEK293T cells, 20ug
Mouse
HEK293T
>MR206539 protein sequence Red=Cloning site Green=Tags(s)
MSEDTTEPLVGSSTLWKELRTLLPDKEEELKLDLGEKVDRSVAALLRQAVGLFYAGHWQGCLQASEAVLD YSWEKLNTGPWRDVDKEWRRVYSFGCLLKALCLCQAPQKATTVVEALRVCDMGLLMGAAILEDILLKVVA VLQTHQLPGKQPARGPHQDQPATKKAKCDASPAPDVMLERMVPRLRCPPLQYFKQHFLVPGRPVILEGV A
DHWPCMKKWSLQYIQEIAGCRTVPVEVGSRYTDEDWSQTLMTVDEFIQKFILSEAKDVGYLAQHQLFDQI PELKRDISIPDYCCLGNGEEEEITINAWFGPQGTISPLHQDPQQNFLVQVLGRKYIRLYSPQESEAVYPH ETHILHNTSQVDVENPDLEKFPKFTEAPFLSCILSPGDTLFIPAKYWHYVRSLDLSFSVSFWWS
TRTRPLEQKLISEEDLAANDILDYKDDDDKV
C-MYC/DDK
47.1 kDa
>0.05 µg/µL as determined by microplate BCA method
> 80% as determined by SDS-PAGE and Coomassie blue staining
25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Store at -80°C after receiving vials.
Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
<u>NP 084118</u>
77035



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	Kdm8 (NM_029842) Mouse Recombinant Protein – TP506539
UniProt ID:	Q9CXT6
RefSeq Size:	2445
Cytogenetics:	7 F3
RefSeq ORF:	1242
Synonyms:	3110005O21Rik; Jmjd5
Summary:	Bifunctional enzyme that acts both as an endopeptidase and 2-oxoglutarate-dependent monoxygenase. Endopeptidase that cleaves histones N-terminal tails at the carboxyl side of methylated argining or lysing residues, to generate 'tailless nucleosomes', which may trigger

transcription elongation. Preferentially recognizes and cleaves monomethylated and

digest histones tails via its aminopeptidase activity. Upon DNA damage, cleaves the N-

hydroxylation at C-3 of 'Arg-137' of RPS6 and 'Arg-141' of RCCD1, but the biological

tubulin acetylation and cytoskeletal microtubule stability involved in epithelial to

(PubMed:30500822). Represses the transcriptional activator activity of the CLOCK-

degradation (PubMed:30500822).[UniProtKB/Swiss-Prot Function]

significance of this activity remains to be established. Regulates mitosis through different mechanisms: Plays a role in transcriptional repression of satellite repeats, possibly by regulating H3K36 methylation levels in centromeric regions together with RCCD1. Possibly together with RCCD1, is involved in proper mitotic spindle organization and chromosome segregation. Negatively regulates cell cycle repressor CDKN1A/p21, which controls G1/S phase transition. Required for G2/M phase cell cycle progression. Regulates expression of CCNA1/cyclin-A1, leading to cancer cell proliferation. Also, plays a role in regulating alpha-

mesenchymal transition (By similarity). Regulates the circadian gene expression in the liver

ARNTL/BMAL1 heterodimer in a catalytically-independent manner (By similarity). Negatively regulates the protein stability and function of CRY1; required for AMPK-FBXL3-induced CRY1

dimethylated arginine residues of histones H2, H3 and H4. After initial cleavage, continues to

terminal tail of histone H3 at monomethylated lysine residues, preferably at monomethylated 'Lys-9' (H3K9me1). The histone variant H3F3A is the major target for cleavage. Additionnally, acts as Fe(2+) and 2-oxoglutarate-dependent monoxygenase, catalyzing (R)-stereospecific

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