

Product datasheet for **RR202547**

Kdm4d (NM_001079712) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Kdm4d (NM_001079712) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Kdm4d
Synonyms:	MGC156756
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>RR202547 representing NM_001079712
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAAGACTAAGTCCACCTGTGCTCAGAATCCAAATTGCAGCATAATGATATTTCTGCCAACCAAGAAG
 AGTTTAAACGACTTTGACAAATACATCGCCTACATGGAGTCCCAAGGGGCACACAGAGCTGGACTGGCCAA
 GGTTCATCCCGCCAAAAGAATGGAGGGCCAGGCAGTCTTATGACAATATCAGTAACATCTTAAATAGCAACT
 CCCCTGCAGCAAGTAGTCTCCGGGCAGGCAGGTGTGTTCACTCAATACCATAAGAAGAAGAAAGCCATGA
 CAGTTGGGCAGTACCGGCACCTGGCCAACAGTAAAAAATACCAAACCCACCACACTGGATTTTGAAGA
 TTTGGAGAGAAAATACTGGAAGAATCGCCTGTATGAGTCACCAATTTATGGTGTGACGTGAGTGGCTCC
 CTGTTTGTAGGGAAAGACTCAACAGTGAATGTGGGCCACCTGGGAACAATTAAGACCTATTGGAACAGG
 AATGCGGCATAGTGATTGAGGGCGTCAACACGCCCTACCTGTACTTTGGCATGTGAAGACCTCCTTTGC
 GTGGCACACGGAGGACATGGACCTGTACAGTATCAACTACCTGCACCTTTGGACAGCCCAAGACCTGGTAT
 GCTGTACCCCTGAGCATGGCAGGCGCCTGGAGCTCTAGCCAAGGAACCTTCCAGGCAGCTCCAGG
 GCTGCCAGGCCTTCTGAGGCACAAGGTGGCGCTCATCTCACCCACTGTGCTCAAGGAGAATGGCATCCC
 CTTTGGTGAATCACCCAGGAGGCTGGGGAGTTTCAATGGTACCTTTCCCTATGGTACCACGCGGGCTTC
 AACCATGGCTTCAACTGTGCAGAAGCCATCAATTCGCCACGCCGAGGTGGATTGACTATGGCAAGGTGG
 CATCTCAGTGCAGCTGTGGGGAGGCCAGGGTGAGCTTCTCCATGGATGCCTTTGTGAGGATCCTGCAGCC
 TGAGCGATATGAGATGTGGAACGAGGTCAAGATCAGGCAGTTGTGGACCACACAGAGGCTATGGGGCT
 ACCAGTCAGGAGCTCACCACTGGCGGGTGATCCAGGCACCAAGAAAAACTTGGGGCTGAAGCATCTCC
 GGCTTCGCCAGGTTTACGCTGTCTTCTGCCTGTAGCCACTGACAGTAACATTGCCAACACACCCAGAT
 GTGCCACACTCCAGGCAAGCAGCAGATTGAAAAGGTGATGAGGTCCAGGAGTCTGACCCAGCCATAGCC
 CCACCATATCCTCTGGGTCTATCTTCTCCTGGCCACATGTCAACTGGAAAACGTGGTCTTGGTCTGCGCC
 CTTGTGAAGTCCAGGAGTCCAGGAGTCCACCAATGGAGCTCCAGTCAAGAGGCGACTTCCAGAAGGCAGAGA
 TGACAGAAGTCCAGCCAGAGCTTCACTCCAGTCCGTGACTGGAGACTTAATAGTCAACTCAGACCTT
 GTAATCTGGGCCACAGCATCTGTGACAGCTTCTGAAGGGGGATTGACCTCTGACCCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RR202547 representing NM_001079712
 Red=Cloning site Green=Tags(s)

MKTKSTCAQNPNCSIMIFRPTKEEFNDFDKYIAYMESQGAHRAGLAKVIPPEWRARQSYDNISNIIAT
 PLQQVVSQAGVFTQYHKKKAMTVGQYRHLANSKKYQTPPHLDFEDLERKYWKNRLYESPIYGADVSGS
 LFDGKTQQWNVHGLGTIQDLLEQECGIVIEGVNTPYL YFGMWKTSFAWHTEMDLYSINYLFHGQPKTWY
 AVPPEHRRLELLAKELFPGSSQGCQAFLRHKVALISPTVLKENGIPFGRITQEAGEFMVTFPYGYHAGF
 NHGFNCAEAINFATPRWIDYGKVASQCSGGEARVSF SMDAFVRILQPERYEMWKRQDQAVVDHTEAMGP
 TSQELTTWRVIQAPRKTWGLKHLRLRQVSRCLLPVATDSNIANNTQMCHTSRQAADSKGDEVQESDPAIA
 PPYPLGLSSPGHMSTGKRLGRRPCELGVQESTNGAPVKRRLPEGRDDRSPSPELQSQSVTGDLIVNSDL
 VNPQPQHPVTASEGLTSDP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

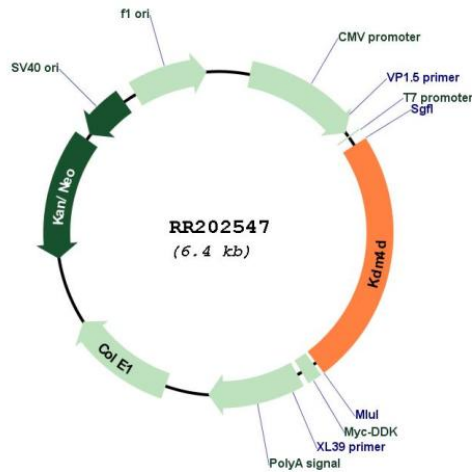
Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_001079712

ORF Size: 1530 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_001079712.1](#), [NP_001073180.1](#)

RefSeq Size: 2357 bp

RefSeq ORF: 1533 bp

Locus ID: 689582

UniProt ID: [A1A5Q5](#)

Cytogenetics: 8q12

MW: 57.2 kDa

Gene Summary: Histone demethylase that specifically demethylates 'Lys-9' of histone H3, thereby playing a central role in histone code. Does not demethylate histone H3 'Lys-4', H3 'Lys-27', H3 'Lys-36' nor H4 'Lys-20'. Demethylates both di- and trimethylated H3 'Lys-9' residue, while it has no activity on monomethylated residues. Demethylation of Lys residue generates formaldehyde and succinate (By similarity).[UniProtKB/Swiss-Prot Function]