

Product datasheet for MR211609

Kdm4b (NM_172132) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Kdm4b (NM_172132) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Kdm4b
Synonyms:	4732474L06Rik; Jmjd2b; mKIAA0876
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR211609 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGC**C

ATGGGGTCCGAGGACCACAGCGCCAGAACCCAGCTGTAAGATCATGACTTTCGCCCCACCATGGATG
AATTCAGGGACTCAACAGATATGTGGCGTACATTGAGTCGCAGGGTGCCACCGTGTGGCCTGGCCAA
GATCATTCCACCAAGGAGTGAAGCCACGGCAGACGTATGATGACATCGACGATGTGGTATCCCAGCG
CCTATTCAGCAGGTGGTACGGGCCAGTCGGGGCTTTTCACACAGTACAACATCCAGAAGAAGGCCATGA
CTGTGGGGGAGTACCGCCGCTAGCCAATAGTGAAGTACTGTACCCACGCCATCAGGACTTCGATGA
CTTGAGCGCAAGTACTGGAAGAACCTGACCTTTGTCTCACCCATCTATGGAGCTGACATCAGTGGCTCC
CTGTACGACGATGACGTGGCGCAGTGGAACATCGCAATCTGAGGACCATCCTAGACATGGTGGAGCGCG
AATGCGGGACCATCATTGAGGGCGTGAATACCCCTACTTGTACTTTGGCATGTGGAAGACCACGTTTGC
CTGGCACACAGAGGACATGGACCTCTACAGCATCAACTACCTGCACCTTCGGCGAGCCTAAGTCTGGTAC
GCCATACCACCGGAGCACGGCAAGCGCCTGGAGCGCCTGGCCATAGGCTTCTTCCCTGGGAGCTCACAGG
GCTGTGATGCCTTCTAAGGCACAAGATGACACTCATCTCGCCATCATCCTGAAGAAGTACGGCATCCC
CTTCAGCCGATTACACAGGAAGCTGGGGAGTTCATGATCACGTTCCCTATGGTTACCATGCGGGCTTC
AACCATGGCTTTAACTGCGCTGAGTCCACTAACTTCGCCACACTGCGCTGGATCGACTATGGCAAAGTGG
CCACACAGTGTACATGTGAAAGGACATGGTCAAGATCTCCATGGACGTGTTTGTACGCATCCTGCAGCC
CGAACGCTATGAGCAATGGAAGCAAGGCCGTGACCTCACAGTGTGGACCACACGAGGCCACAGCCCTG
AGCAGTCTGAGCTCAGCTCCTGGAGTGCCTCGCGCACCTCCATCAAGGCCAAGCTCCTGCGCAGACAAA
TTAGTGTGAAGGAGAGCAGACCTGGAGAAAGGCTGAGGAGGAGAGGAGCGGGAGCCGACCAGGAGGCC
AGGGCCGGCGTACACCCGAGACGGAGCCAGCCCAAGAAGTCAAACCTGAAGAGTCCAGGTCTCCAGGG
GAAGCCACGGCTGGGTATCTACTCTGGATGAGGCCAGGGGCTGCTCCCGAGGAGAGGCCATGCCTGAGG
ACGAGGAGGAGGAGGAGTGTACCTTACAGGCCATGAGGCCGAGGGTGTGGAAGAGGATGCCAGAGG
CAAGCCTCGGCCACTAAGGCCAGAAATAAGAAGAAGACTCCCAGCCCGTTCGTCACCCCGTTGCTGCT



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GCCCCACCAGCCCTATCCCCACCAGGAGGTCCTGAGGCCACCACCCCAACCCAAGTCTCCAGGGCCAG
 CTATGGGCCCCATGGCTGCAGAGGGGGTCTCCACCAACACCCCTCAATGTCGTGCCTCCTGGGGCCG
 AGTTGAGGAAGCAGAGGTGCGGCCACGGCCATTATCCAATGCTGTACGTGTTGCCCGCACCAGCAGC
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 TACAGAGCCAGGTTTATCTCCATGGCCACCAGCCTCATCTACCAGGTAGAGTTTGAGGATGGTCTCAGC
 TGACTGTGAAGCGTGGGACATCTTACACTGGAAGAGGAGCTGCCAAGAGGGTGCCTCCCGCTGTC
 ACTGAGCACTGGCACACCACAGGAGCCAGCTTCTGAGACGATGTGAAGGCTGCCAAGCGCCACCGG
 GTGGCCTCAGTGTGCCACCACACTGAGGACACAGGGCGTAGCCAGAATACCTGTCCTTCATGGAGA
 GCCTGCTGCAGGCACAGGGCCGCTGGAGACCCTTC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR211609 protein sequence
 Red=Cloning site Green=Tags(s)

MGSEHSAQNPSCKIMTFRPTMDEFDFNRYVAYIESQGAHRAGLAKIIPPKEWKPRQTYDDIDDVVIPA
 PIQQVVTGQSGLFTQYNIQKKAMTVGEYRRLANSEKYCTPRHQDFDDLERYWKNLTFVSPPIYGADISGS
 LYDDDVAQWNIGNLRTILDVVERECGTIEGVNTPYL YFGMWKTTFAWHTEDMDL YSINYLHFGEPKSWY
 AIPPEHGKRLERLAIGFFPGSSQGCDAFLRHKMTLISPIILKKGIPFSRITQEAGEFMITFPYGYHAGF
 NHGFNCAESTNFATLRWIDYGVATQCTCRKDMVKISMDVFRILQPERYEQWKQGRDLTVLDHTRPTAL
 SSPELSSWSASRTSIKAKLLRRQISVKE SRPWRKAE EERRREPTRRPGPASHRRRSQPKKSKPEESRSPG
 EATAGVSTLDEARGCSRGEAMPEDEEEELLPSQGHEAEGVEEDGRGKPRPTKARNKKKTPSPSSPPLLS
 APPALFPTEEVL RPPQPKSPGPAMGMAAEGPPPTPLNVVPPGAPVEEA EVRPRPIIPMLYVLPRTSS
 TDGDREHSAHAQLAPMELGPEEENQAQAGDSQGTTPF SKLKVEIKKSRRHPLGRPPTRSPLSVVKQEASS
 DEEAFLFSGEDDVTDPALRSLSLQWKNKAASFQAERKFNAAL SEPYCAICTLFYPYSQSVQTERDS
 AVQPPSKSGQRTRPLIPEMCFTSSGENTEPLPANSYVGEDGTSPLISCAHCLQVHASCYGVRELAKEG
 WTC SRCAAHAWTAECLCNLRGGALQRTTEHRWIHVICAI AVPEVRFLNVIERNPVDVSAIPEQRWKLKC
 IYCRKRMKRVSGACIQCSYEHCTSFHVTC AHAAGVLM EPDWPYVVSITCLKHRASGAGGQLLRTVSLG
 QIVITKNRNGLYYRCRVIGTTAQTFYEVNFDDGSYSDNLYPESITSRDCLRLGPPPEGELVELRWTGDLN
 YRARFISMATSLIYQVEFEDGSQ LTVKRGDIFTLEELPKRVR SRLSLSTGTPQEPSFSGDDVKA AKRPR
 VASVLATTTEDTGRSPEYLSFMESLLQAQRPGAPF

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_172132

ORF Size: 3261 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_172132.3](#)

RefSeq Size: 4610 bp

RefSeq ORF: 3261 bp

Locus ID: 193796

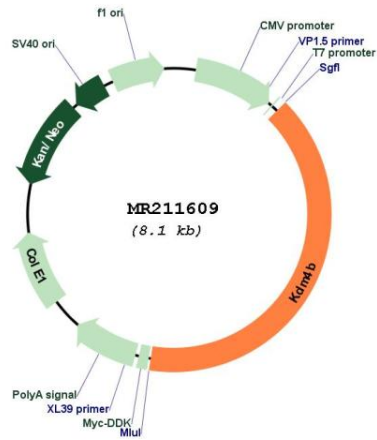
UniProt ID: [Q91VY5](#)

Cytogenetics: 17 D

MW: 121.6 kDa

Gene Summary: Histone demethylase that specifically demethylates 'Lys-9' of histone H3, thereby playing a role in histone code. Does not demethylate histone H3 'Lys-4', H3 'Lys-27', H3 'Lys-36' nor H4 'Lys-20'. Only able to demethylate trimethylated H3 'Lys-9', with a weaker activity than KDM4A, KDM4C and KDM4D. Demethylation of Lys residue generates formaldehyde and succinate (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR211609