

Product datasheet for **MG211609**

Kdm4b (NM_172132) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Kdm4b (NM_172132) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Kdm4b
Synonyms:	4732474L06Rik; Jmjd2b; mKIAA0876
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG211609 representing NM_172132 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGGTCCGAGGACCACAGCGCCAGAACCCAGCTGTAAGATCATGACTTCCGCCACCATTGGATG
AATTCAGGGACTCAACAGATATGTGGCGTACATTGAGTCGCAGGGTGCCACCGTGCTGGCCTGGCCAA
GATCATTCCACCAAGGAGTGGAAGCCACGGCAGACGTATGATGACATCGACGATGTGGTCATCCCAGCG
CCTATTCAGCAGGTGGTACGGGCCAGTCGGGGCTTTTACACAGTACAACATCCAGAAGAAGGCCATGA
CTGTGGGGGAGTACCGCCGCTAGCCAATAGTAAAAAGTACTGTACCCACGCCATCAGGACTTCGATGA
CTTGAGCGCAAGTACTGGAAGAACCTGACCTTTGTCTCACCCATCTATGGAGCTGACATCAGTGGCTCC
CTGTACGACGATGACGTGGCGCAGTGGAACATCGCAATCTGAGGACCATCCTAGACATGGTGGAGCGCG
AATGCGGGACCATCATTGAGGGCGTGAATACACCTACTTGTACTTTGGCATGTGGAAGACCACGTTTGC
CTGGCACACAGAGGACATGGACCTCTACAGCATCAACTACCTGCCTTCGGCGAGCCTAAGTCTGGTAC
GCCATACCACCGGAGCACGGCAAGCGCCTGGAGCGCCTGGCCATAGGCTTCTTCCCTGGGAGCTCACAGG
GCTGTGATGCCTTCTAAGGCACAAGATGACACTCATCTCGCCATCATCCTGAAGAAGTACGGCATCCC
CTTCAGCCGATTACACAGGAAGCTGGGGAGTTCATGATCACGTTCCCTATGGTTACCATGCGGGCTTC
AACCATGGCTTTAACTGCGCTGAGTCCACTAACTTCGCCACACTGCGCTGGATCGACTATGGCAAAGTGG
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GCCCCACCAGCCCTATCCCCACCAGGAGGTCCTGAGGCCACCACCCCAACCCAAGTCTCCAGGGCCAG
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 GTGGCCTCAGTGTGCCACCACCACTGAGGACACAGGGCGTAGCCAGAAATACCTGTCCTTCATGGAGA
 GCCTGCTGCAGGCACAGGGCCGGCTGGAGACCCTTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG211609 representing NM_172132
 Red=Cloning site Green=Tags(s)

MGSEDHSAQNPSCKIMTFRPTMDEFDFNRYVAYIESQGAHRAGLAKIIPPKEWKPRQTYDDIDDVVIPA
 PIQQVVTGQSGFLTQYNIQKKAMTVGEYRRLANSEKYCTPRHQDFDRLERKYWKNLTFVSPFIYGADISGS
 LYDDDDVAQWNIGNLRTILDMVERECGTIEGVNTPYL YFGMWKTTFAWHTEDMDLYSINYLHFGPEKSWY
 AIPPEHGKRLERLAIGFFPGSSQGCDAFLRHKMTLISPIILKKGIPFSRITQEAGEFMITFPYGYHAGF
 NHGFNCAESTNFATLRWIDYGVATQCTCRKDMVKISMDVFRILQPERYEQWKQGRDLTVLDHTRPTAL
 SSPPELSSWSASRTSIKAKLLRRQISVKESRPWRKAEERRRREPTRRPGPASHRRRSQPKKSKPEESRSPG
 EATAGVSTLDEARGCSRGEAMPEDEEEELLPSQGHEAEVVEEDGRGKPRPTKARNKKKTPSPSSPPLLS
 APPALFPTEEVLRPPQPKSPGAMGMAAEGGPPPTPLNVVPPGAPVEEA EVRPRPIIPMLYVLPRTSS
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 AVQPPSKSGQRTRPLIPEMCFSSGENTEPLPANSYVGEDGTSPLISCAHCLQVHASCYGVPELAKEG
 WTCRCAAHAWTAECCLCNLRGGALQRTTEHRWIHVICAIAVPEVRFNLNVIERNPVDVSAIPEQRWKLKC
 IYCRKRMKRVSGACIQCSYEHCTSFHVTCAHAAGVLMPEDDWPYVVSITCLKHRASGAGGQLLRTVSLG
 QIVITKRNRLYYRCRVIGTTAQTIFYEVNFDGSDNSDNLYPESTITSRDCLRLGPPPEGELVELRWDGNL
 YRARFISMATSLIYQVEFEDGSQLTVKRGDIFTLEELPKRVRSLSLSTGTPQEPSFSGDDVKA AKRPR
 VASVLATTTEDTGRSPEYLSFMESLLQAQGRPGAPF

TRTRPLE - GFP Tag - V

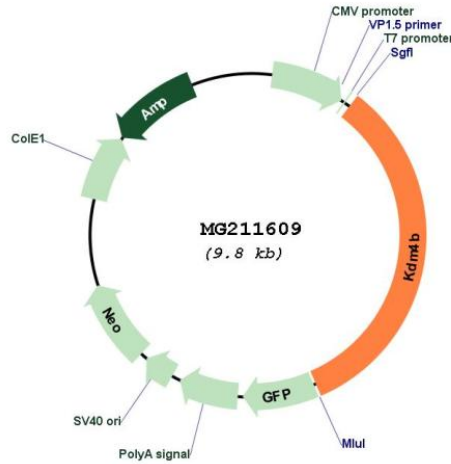
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_172132

ORF Size: 3258 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:	<ol style="list-style-type: none">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:	4667 bp
RefSeq ORF:	3261 bp
Locus ID:	193796
UniProt ID:	Q91VY5
Cytogenetics:	17 D
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]