

Product datasheet for **MR210840**

Kdm1b (NM_172262) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Kdm1b (NM_172262) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Kdm1b
Synonyms:	4632428N09Rik; AI482520; Aof1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR210840 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCCGCATCTCGAGGGAGGTCAAAGAAGAGAAGCAATTTGGAGCTTTCTCCTGATAACCTGCCTTTGA
 GGAGCTCTGGGCGCAGGCAAAGAAGAAAGCAGTAGAGATCCCGATGAGGATGAAGATGGTTTCGTCGGA
 GAAGAAGTACCGAAATGTGAAAAGGCAGGCTGTACGGCGGCGTACCCTGTGTGCTTTGCAAGCGTTCT
 GAAAGATGTGCCAAAAATGGTTACACCTCCCGATGGTATCACCTTTCTGTGGGGAACACTTCTGCAATG
 AATGCTTTGACCACTACTACAGAAGCCACAAGATGGGTATGACAAATACAGTGCATGGAAAAGAGTGTG
 GACCAGCAACGGCAAGACGGAGCCAAGCCCAAGGCGTTCATGGCAGACCAGCAGCTGCCCTACTGGGTG
 CAGTGCACAAAACCCGAGTGTGAAAGTGGAGGCAGCTGACCAAGGAGATCCAGCTTACTCCACACATGG
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 CCCCAGGATCTGAGAGTGTGGAAGTTTCCAACCACTGGTGGTACCCCATGCTCATCCAGCCTCCGTTG
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 GCACCAGCACACATCGTGCCACCGTACAGCTGTACCACAACCACCGGAGTGGCAGCCCGGGGAGAT
 GGAGCCCTCCAAGGCAGCCCTCTTCACTTGTCTAGGCATGAACCGGTAATCCAGCCGTTTACCAG
 CCCAACGAGTGTGGAAAGCGCTGTGCGTGAGGCCAGACGTGATGGAGCTGGATGAGCTCTACGAGTTCC
 CAGAGTATTCGCGGGACCCACCATGTACCTGGCTTTGAGAACTCATCCTCGCACTGTGGTACACAAA
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 TCGTTCAGGAAGTGGAGAGGATCTTTACTTTCATGACGAGGAAAGGCCTCATCAACACAGGCGTTCTCA
 CGGTGGCAGCCGCCAGCATCTTCTTAAACACTACCACAATAAATCTGTTCTGGTTGTGGGCTGG
 TCCAGCAGGCTTAGCAGCTGCTAGGCAACTGCATAACTTTGGGATGAAGGTGACTGTCTGGAAGCCAAA
 GACCGGATTGGAGCCGAGTATGGGATGACAAGTCTTTAAAGGCGTGGTAGTAGGAAGGAGCCCAAGA
 TTGTCAATGGCTGATTAATAAACCAGTAGCACTAATGTGTGAGCAACTTGGCATCAGCATGCGTAAGTT
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 GCTGTATTCTATGACATGGACTCTCAGCAGAGTGTGCTGATGTCGGTGATCACAGGGGAGGCAGTGGCGT
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 GCAGGAGATCCCAGAACCACAAAAGTATTTTGTACACGGTGGAGCACAGAGCCATGGATCCAGATGGCA
 TATAGTTTCGTGAAGACCTTTGGAAGTGGCGAGGCTATGATATTATTGCTGAAGAAATACAAGGAACG
 TCTTTTTTGTGGTGGGCAACAAACAGGCATTTCCACAAACTGTTACTGGGGCATATTTAAGTGGTGT
 ACGAGAAGCAAGCAAGATTGCAGCCTTT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR210840 protein sequence

Red=Cloning site Green=Tags(s)

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MAASRGRSKRSNLELSPDNLPLRSSGRQAKKAVEIPDEDEDGSSEKKYRKCEKAGCTAAYPVCFASAS
ERCAKNGYTSRWYHLSCGEHFCNECFDHYRSHKDGDKYSAWKRVWTSNGKTEPSPKAFMADQQLPYWV
QCTKPECCKWRQLTKEIQLTPHMARTYRCGMKPNTITKPDTPDHCSFPEDLRVLEVSNHWWYPMLIQPPL
LKDSVAAPLLSAYYPDCVGMSPSCTSTHRATVTAATTTTGSASPGEMEPSKAAPSSLVLGMNRYFPFYQ
PNECGKALCVRPDMELDELYEFPEYSRDPTMYLALRNLILALWYTNCKEALTPQKCIPIHIVRGLVRIR
CVQEVERILYFMTRKGLINTGVLTVAAAGQHLLPKHYHNKSVLVVGAGPAGLAAARQLHNFQGMKVTVLEAK
DRIGGRVWDDKSFKGVVGRGPQIVNGCINNPVALMCEQLGISMRKLGERCDLIQEGGRITDPTVDKRM
D FHFNALLDVVSEWRKDKTLLQDVPLGEKIEEYRAFVKESGIQFSELEGQVLQFHL SNLEYACGSSLHQV
SARSWDHNEFFAQFAGDHTLLTPGYSTIEKLAEGLDIRLKSPVQSIDYTGDEVQVTTTDMGMSAQKVL
VTVPLAILQRGAIQFNPLSEKKMKAINSLGAGIEKIALQFPYRFWDSKVQGADFFGHVPPSASQRGLF
AVFYDMSQQSVLMSVITGEAVASLRTMDDKQVLQCCMGILRELFKEQEIPEPTKYFVTRWSTEPWIQMA
YSFVKTFGSGEAYDIIAEEIQGTVFFAGEATNRHFPQTVTGTAYLSGVREASKIAAF
  
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TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_172262

ORF Size: 2481 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_172262.3](#), [NP_758466.1](#)

RefSeq Size: 4987 bp

RefSeq ORF: 2481 bp

Locus ID: 218214

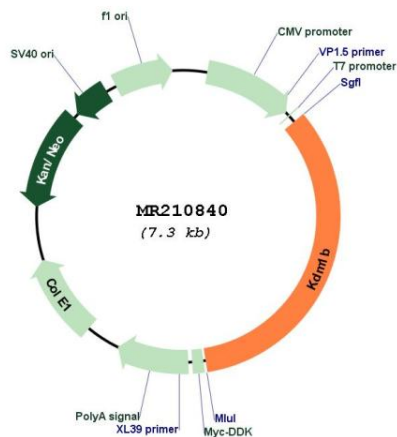
UniProt ID: [Q8CIG3](#)

Cytogenetics: 13 A5

MW: 92.6 kDa

Gene Summary: Histone demethylase that demethylates 'Lys-4' of histone H3, a specific tag for epigenetic transcriptional activation, thereby acting as a corepressor. Required for de novo DNA methylation of a subset of imprinted genes during oogenesis. Acts by oxidizing the substrate by FAD to generate the corresponding imine that is subsequently hydrolyzed. Demethylates both mono- and di-methylated 'Lys-4' of histone H3. Has no effect on tri-methylated 'Lys-4', mono-, di- or tri-methylated 'Lys-9', mono-, di- or tri-methylated 'Lys-27', mono-, di- or tri-methylated 'Lys-36' of histone H3, or on mono-, di- or tri-methylated 'Lys-20' of histone H4. [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR210840