

Product datasheet for MC223267

Kdm4a (NM_172382) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Kdm4a (NM_172382) Mouse Untagged Clone
Tag: Tag Free
Symbol: Kdm4a
Synonyms: D4ErtD222e; JHDM3A; Jmjd2; Jmjd2a; mKIAA0677
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >MC223267 representing NM_172382
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGGCTTCTGAATCAGAACTTTGAACCCAGTGCTCGGATCATGACCTTTACCCACCATGGAAGAGT
 TCCGGAACCTCAGCCGCTACATTGCCTACATTGAATCCCAAGGAGCTCATCGGGTGGGCTAGCCAAGT
 CGTTCCCTCCAAAGAGTGAAGCCTCGAACATCCTACGACGATATTGATGATCTAGTCATCCCTGCGCC
 ATCCAGCAGCTGGTGACTGGCCAGTCTGGCCTTCTCACTCAGTACAACATACAGAAGAAAGCCATGACCG
 TTCGTGAGTTCGCAAGATCGCCAATAGCGACAAGTACTGCACCCCGGATACAGTGAATTTGAAGAACT
 TGAGCGTAAATACTGGAAAACTCACATTCAATCCTCCCATCTATGGAGCAGACGTGAATGGTACTCTC
 TATGAACAGCACGTTGATGAGTGAATATCGGCCGGCTGAAGACCATCCTGGACCTGGTGGAGAAGGAGA
 GCGGGATCACCATTGAGGGGGTGAACACCCCTACCTTACTTCGGCATGTGGAAGACGCTCCTTCGCCTG
 GCACACGGAAGACATGGATCTATACAGCATCAACTATCTGCACCTCGGAGAGCCAAAGTCTTGGTACTCT
 GTTCCACCTGAGCATGGGAAACGCTGGAGCGTCTTGCCTAAAGGCTTTTCCAGGAAGTCAAAAGT
 GTGAGGCTTTTCCGCCACAAGATGACCCTGATCTCCCATTAATGCTGAAGAAGTATGGCATCCCTT
 TGACAAGGTGACCAAGAAGCTGGCGAGTTTATGATCACTTTTCCGTATGGTTACCATGCTGGCTTCAAC
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 GCCGAGTTCCTGAAGGACAGCGGGGACTAACCCGAGAGCAGGGAGTGAGGAGTGCCAGAGGAGGACG
 TGAAGCAGCGGATCAGGAGAGGAGGGGGATGTGAAGAGAAGCCTGGCCAAGCATCGGATCGGGACAAA
 GAGACACAGAGTCTGTCTGAAAATACCCAGGAGGTGAGTCAAGAGCGAGCTTCCCAAGGAAGAGCTA
 AGTTCTGGACAGTATGAGATGACAGAGTGCCCGGCCACCTCGCCAGTGAGGCCACCCACAGCTCCG
 TGCGGCAAGTTGAGGACAGTCTTCCCTCCAGATTACTCTGACCCCACTGAAGTCAAATTTGAAGAGCT
 GAAGAATGTCAAAGTGAAGAGGAAGATGAGGAGGATGAGCCGAAGCAGCCGACTGGACCTTTCTGTG
 AATCCTGCGTCTGTAGGAGGACGCTCGTCTTCTCGGGTCCAAAAGAAATCATCTTCCAGCCTGGCT



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CCACTTCATCTCAGGATTCAGTTTCTTCAGATTCTGAAACCGCCGAGTCTGTCTCTTGCCAGGGCCAAGA
GAAACGGGAGTTCTCACCGTGCACAGCTATGCCAGAGGGGACGGCAAGGCTGCCACAGGAGAGCCGAGT
GTGAAGAAGAAGCGCAGTGTCTCCCGCAGCATCAGCGAGCAGGAGCTGGCAGAGGTTGCAGATGAGTACA
TGCTTTCCCTGGAGGAGAATAAGAAGACCAAGGGTCGCCGCCAGCCCTTGAGCAAGCTCCCACGCCACCA
CCCCTCGTGTGCAGGAGTGCCGACGGATGACGAGACTTCTGAGCAGCTGACCCCGAGGAGGAGGCT
GAGGAGACAGAGGCTTGGGCCAAGCCTCTGAGCCAGCTGTGCCAGAACCACCCCGAACTTTGAGGCTG
AAAAGGAATTCATGAGATCATGGCCCAACAGGCCCTCACTGTGCTGTGTGTATGATCTTCCAGACCTA
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AGGACCAAGCCACTGATCCCGAAATGTCTTTACCACCACTGGCTGCAGCACAGACATCAATCTGTCCA
CCCCGTACCTAGAGGAGGATGGCACCAGCATGCTAGTGTCTGCAAGAAGTGCAGTGTCCGGGTCCACGC
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TTCATGTTTCATGTGCAGTGGCAATCTAGAAGCAAGGTTGTCAACATTGCTGAAAGAAGTCCAGTGGA
TGTGAGCAAAATCCCTCTGCCCCGCTTCAAAGTGAAGTGTGTTTTTTGTAAGAAGCGGAGAAAACGGAAT
GCTGGCTGCTGTGTGCAGTGTCTCCATGGCCGCTGCCCACTGCCTTCCATGTGAGCTGTGCCAGGCTG
CTGGGGTGATGATGCAACCCGACGACTGCCCTTTGTTGTCTTACATCACGTGCTCCGTACAAGATTCC
CAATCTGGAGCGTGCTAAGGGAGCCTTGCTGAGCATCACGGCGGGCCAGAAGTTATCAGCAAACACAAG
AACGGGCGCTTCTACCAGTGTGAGGTGGTCCAGACTCACCACCGAGACCTTCTACGAAGTCAACTTTGACG
ACGGCTCCTTCAGTGACAACCTTTATCCTGAGGACATAGTGGTAATGTCTGAAAGCGGCTTCTGGCAGCA
CTTTGGGTCTGGGACATCTTCTGTTATTGCCGGCTGGATGACTGTGGTCTCTTTGCCTGCCCTGGTCA
GTTTCCAAACAGAAAGAGCCTTTATCCAGGTTCCCTTTCAAGGAAGAGTGACATGCTGGGGCGCTCA
GCTTCCCCGAGGAGTTTCCAGAGGAGTCAGTGTCCCTGCAGTCCACTGAAATATGCTTATATCTCAGACCA
AATTATTTCTAATAGCATCTAG
    
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ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** SgfI-MluI
- ACCN:** NM_172382
- Insert Size:** 3102 bp
- OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
- 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_172382.2](#), [NP_759014.2](#)
- RefSeq Size:** 3376 bp
- RefSeq ORF:** 3102 bp

Locus ID: 230674

UniProt ID: [Q8BW72](#)

Cytogenetics: 4 54.31 cM

Gene Summary: Histone demethylase that specifically demethylates 'Lys-9' and 'Lys-36' residues of histone H3, thereby playing a central role in histone code (PubMed:24953653). Does not demethylate histone H3 'Lys-4', H3 'Lys-27' nor H4 'Lys-20'. Demethylates trimethylated H3 'Lys-9' and H3 'Lys-36' residue, while it has no activity on mono- and dimethylated residues. Demethylation of Lys residue generates formaldehyde and succinate. Participates in transcriptional repression of ASCL2 and E2F-responsive promoters via the recruitment of histone deacetylases and NCOR1, respectively (By similarity).[UniProtKB/Swiss-Prot Function]
Transcript Variant: This variant (2) has an alternate 3' terminal exon, compared to variant 1, that results in a protein (isoform 2) with a shorter and distinct C-terminus, compared to isoform 1. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.