

Product datasheet for MC223755

Kdm2a (NM_001001984) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Kdm2a (NM_001001984) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Kdm2a
Synonyms:	5530401A10Rik; 100043628; AA589516; AW536790; Cxxc8; Fbl7; Fbl11; Fbxl11; Gm4560; Jhdm1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
Fully Sequenced ORF:	>MC223755 representing NM_001001984 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAACCTGAAGAAGAAAGGATTCGGTACAGCCAGAGATTGCGTGGTACCATGCGTCGTCGCTATGAAG
ATGATGGCATTTCAGATGATGAAATTGAAGGGAAAAGAACTTTTGACTTGGAAAGAGAAGCTCCAAACCAA
CAAATATAATGCCAATTTTGTACTTTTATGGAGGGAAAAGATTTAATGTAGAGTATATCCAGCGGGGT
GGCTTGAGAGACCCTCTCATTTTCAAGAATTCTGATGGACTTGAATAAAGATGCCGGATCCAGACTTCA
CAGTGAATGATGTCAAAATGTGTGTGGGAGTCGTCGGATGGTGGATGTCATGGATGTGAACACACAGAA
GGGGATTGAAATGACCATGGCACAATGGACACGATACTATGAGACTCCAGAGGAAGAGCGAGAAAAACTC
TATAATGTTATCAGCCTAGAGTTTAGCCACACCAGGCTTGAGAATATGGTGCAGCGGCCCTCCACCGTGG
ATTTTCATTGACTGGGTAGATAACATGTGGCCAAGGCACCTTGAAGAAAAGTCAGACAGAATCAACAAATGC
CATCTTAGAGATGCAGTACCCTAAAGTGCAAAAGTACTGTCTAATGAGTGTTCGAGGCTGCTATACTGAC
TTCCATGTGGATTTTGGAGGTACTTCTGTTTGGTATCACATCCACCAAGGTGAAAGGTCTTCTGGCTCA
TCCCCCTACAGCCACAACTGGAGCTGTACGAGAATTGGCTGCTATCAGGGAAACAGGGAGACATCTT
TCTGGGTGACCGGTGTCAGATTGCCAACGAATTGAGCTCAAGCAGGGCTATACCTTCGTTATTCCTCA
GGTTGGATTCATGCTGTGATACTCCTACAGACACATTAGTGTGGAGGCAATTTTGGCATAGCTTCA
ACATCCCCATGCAATTAAGATATACAGCATTGAAGATCGAACACGGGTTCCAAATAAATTCGTTACCC
ATTTTACTATGAAATGTGTTGGTATGTGTTGGAGCGCTATGTATACTGCATAACCAACCGATCCCACCTA
ACTAAGGATTTTCAGAAAGAATCCCTTAGCATGGATATGGAGTTAAATGAGTTGGAGTCTGGAAATGGTG
ATGAGGAAGGGGTGGACAGAGAAGCCCGACGCATGAACAATAAGCGATCTGTGCTTACCAGCCCTGTTGC
TAATGGAGTGAACCTGGATTACGATGGACTTGGCAAAGCCTGCCGAAGTCTTCCAAGTCTGAAGAAAAC
TTGTCTGGAGACTCATCCTCAGACTCTACCCGGGGATCCCACAATGGCCAAGTTTGGGATCCCCAATGTA
GCCCTAAAAGGATAGGCAAGTGCATCTCACCCATTTTGAAGTGAAGGTCTTCGATGCTTGTAGATAA
GTTAGAGTCACTGCCACTGCACAAGAAGTGTGCCACAGGAATAGAAGACGAAGATGCTCTGATTGCT



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GATGTAAGATTTTCTGGAAGAACTTGCCAGTAGCGATCCCAAGTTAGCCCTCACTGGAGTCCCTATAG
TACAGTGGCCAAAAAGGGATAAGCTTAAATTCCTACCAGGCCAAAGGTGAGGGTTCCTACAATCCCAT
CACAAAGCCTCACACCATGAAGCCAGCTCCACGCTAACACCTGTAAAGCCTGCTGCAGCCTCCCCATT
GTGTGAGGAGCCAGGCGGAGAAGAGTGCAGGAAATGCAAAGCTTGTGTGCAAGGAGAATGTGGAG
TCTGCCACTACTGCAGGGACATGAAGAAATTTGGTGGACCTGGACGCATGAAGCAATCCTGTGCTCCTCCG
ACAGTGCCTTAGCACCCAGACTGCCTCATTACAGTACGTGTTCTCTGTGGAGAAGTAGATCAGAATGAA
GAGACCCAGGACTTTGAAAAGAACTCATGGAATGCTGCATCTGCAACGAGATAGTTCATCCTGGTGC
TCCAGATGGATGGAGAGGGGTTGCTGAACGAGGAATTGCCAAATTGCTGGGAGTGTCCAAAGTGTACCA
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GTCTTACGGCCCTGAGGAGCTGCGAGGAGCCTCTCACACCCCGCCTCACTCACCTACTTCCATGCTGC
AGCTCATCCACGACCCGGTTTCTCCCGGGGATGGTACTCGGTATCCCTGGGGCTGGCCCAAGCGA
CCACCACAGTCCAGCCGTGATGAACGCTTCAAACGGCGGAGTGTGCGGCTACAAGCCACCGAGCGC
ACCATGGTACGGGAAAAGGAGAACAATCCAGCGGCAAAAAGGAGCTGTCTGAAGTTGAGAAAGCCAAGA
TCCGGGGATCGTACCTCACTGTCACTCTACAGAGGCCACCAAAGAGCTCCACGGGACATCCATTGTCC
CAAGCTGCAGGCCATCACGGCCTCTGCCAACCTTCGCCCTAACCCCGCGTGTCTAATGCAGCACTGC
CCAGCCCGAAACCCAGCATGGGGATGAGGAGGGGCTTGGGGGAGAGGAGGAGGAGGAGGAGGAGG
AGGAAGATGACAGTGCAGAGGAGGGGGTGCAGCCAGGCTGAATGGCCGGGGCAGTTGGGCTCAGGATGG
AGACGAAAGCTGGATGCAGCGGGAGGTCTGGATGTCTGTCTCCGCTACCTCAGCCGCAAGAATTTGT
GAATGTATGCGAGTGTGCAAGACATGGTATAAATGGTGTGTGATAAACGACTTTGGACAAAAATTGACT
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CCTCAGCTGGACTAACATCTCCAAAAGCAGCTGACATGGCTGGTCAATAGGCTGCCAGGATTAAGAGC
CTCCTCTAGCAGGCTGTTCTGGTCTGCAGTATCTGCCCTCAGCACTCCAGCTGCCCGCTTCTCAGGA
CCCTTGATCTTCGGTGGGAGTAGGAATTAAGACCCTCAAATTCGGGACTTGCTGACTCCACCCACAGA
TAAGCCAGGTCAAGACAATCGAAGCAAACCTCCGGAACATGACTGACTTCCGGCTGGCAGGCTTGACATC
ACAGATGCTACTCTCCGACTCATCTCCGACATGCCCCTTTTGTCTCGACTTGACCTCAGTCACTGCA
GTCACCTTACAGATCAGTCCCAACCTACTAAGTGTGTGCGGTCTTCCACTCGATACTCCCTTACAGA
GCTCAATATGGCAGGTTGCAATAAATTGACAGACCAGACCCTGTTCTTCCTAAGGCGAATTGCTAATGTC
ACCTTGATTGACCTTCGAGGATGCAAACAGATCACGAGAAAAGCCTGTGAGCACTTCACTCAGACTTGT
CCATCAACAGCCTCTACTGCCTGTCTGATGAGAACTGATACAGAAGATTAGCTAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** SgfI-MluI
- ACCN:** NM_001001984
- Insert Size:** 3486 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_001001984.2](#), [NP_001001984.2](#)

RefSeq Size: 7268 bp

RefSeq ORF: 3486 bp

Locus ID: 225876

UniProt ID: [P59997](#)

Cytogenetics: 19 A

Gene Summary: Histone demethylase that specifically demethylates 'Lys-36' of histone H3, thereby playing a central role in histone code. Preferentially demethylates dimethylated H3 'Lys-36' residue while it has weak or no activity for mono- and tri-methylated H3 'Lys-36'. May also recognize and bind to some phosphorylated proteins and promote their ubiquitination and degradation. Required to maintain the heterochromatic state. Associates with centromeres and represses transcription of small non-coding RNAs that are encoded by the clusters of satellite repeats at the centromere. Required to sustain centromeric integrity and genomic stability, particularly during mitosis (By similarity). Regulates circadian gene expression by repressing the transcriptional activator activity of CLOCK-ARNTL/BMAL1 heterodimer and RORA in a catalytically-independent manner (By similarity).[UniProtKB/Swiss-Prot Function]