

Product datasheet for MC225396

Kmt2b (NM_029274) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Kmt2b (NM_029274) Mouse Untagged Clone
Tag: Tag Free
Symbol: Kmt2b
Synonyms: 2610014H22Rik; mKIAA0304; Mll2; Wbp7
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >MC225396 representing NM_029274
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGC**C

ATGGCGGGCGGGCGGGCGGGCGGCAGTTGCCCGGGCCTGGCTCCGCACGGGGCCGCTTCCCGGGCCGGC
 CGCGGGGTTCCGGCGGGGGCGGGGCCCGGGCGCCGAGGCAACGGAGCCGAAAGAGTCCGGGTAGCCCT
 GCGGCGCGGTGGCGGGCGGGCGGGCCGGGAGGAGCCGAGCCCGGGGAGGACACGGCCCTGCTCCGTTTG
 CTGGGTCTTCGCCGGGGCCTGCGCCGGCTCCGCCGCTGTGGGCTGGTGCAGGAGTTCAGCGAGGCGGAG
 GCCGCGGGCGGGGACGGGGCTGGGGCCGAACCGAGGCTGCATGCCGGAGGAAGAGAGCAGTGCAGGGGA
 ATCCGAGGAGGAGGAGTTTCAGGGTTTTTCATTAGATGAAGATGTGGCCCCAGTTCCCTGCGCTCTGCG
 CTTCCGGTCCCAGCGAGGTCGAGCCCTCGGGGTCGGGGCCGAAGCATAAGACGACCCCCCTTCTCCTC
 GCCTAGCAGATGTGACTCCTGTCCCCCAAAGGCCCTACTCGAAACGGGGTGAGGAGGGCACAGAACG
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GAAGCCCTTTGGAAGACAGTCTACTGTGGTCCCCAAAAGTACCACCTTTTTAAAGAATATACGGCAGTT
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 CCCCATCATTCCCCAACAGCTCCACCTCCTGGACTTGCCTCCAGGACCCCTGCTCAGTGTGTTACCA
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 ACCTGAACAATCCTGGGAGCAGCCTGAGGAGGAAAGCCCTGGGCGCCCCAGGACCGGTGCTCTTGT
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 CAGAGCAGCTCCCTGGGGCCAGCGCTGCCAGCATTATAAGTTCGCTACCACCAGCAGGGAGAGGGCCA
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 CAAAAAGACATCCAAAGAGGCTGTGGGAGTCTACAGATCAGCTATCCATGGACAGGCTGTGTTTGTAAA
 CGCAACATCGATGCGGGAGAGATGGTCAATTGAGTACTTGGCATTGTTCATTGCTCTGTGCTGACTGACA
 AGCGAGAGAAGTTCTATGATGGGAAGGGTATTGGGTGCTACATGTTCCGCATGGATGACTTGTGTTGTT
 GGACGCCACCATGCACGGCAATGCTGCCGATTATCAACCACCTCATGTGAGCCCAACTGCTTCTCTGT
 GTCATCCATGTGAAGGCCAGAAACACATTGTCATCTTTCCTTGCCTTGCGCCGATCCTGCGAGGTGAGGAGC
 TCACCTATGACTACAAGTTTCTATCGAGGATGCCAGCAACAAGCTGCCCTGCAACTGTGGGCCAAGCG
 CTGCCGTCGTTTCTTAAC**TGA**

AGCGGACCGACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
 TGGATTACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: Sgfl-RsrII
ACCN: NM_029274
Insert Size: 8142 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

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_029274.2](#), [NP_083550.2](#)

RefSeq Size: 8457 bp

RefSeq ORF: 8142 bp

Locus ID: 75410

UniProt ID: [O08550](#)

Cytogenetics: 7 B1

Gene Summary: Histone methyltransferase. Methylates 'Lys-4' of histone H3. H3 'Lys-4' methylation represents a specific tag for epigenetic transcriptional activation. Plays a central role in beta-globin locus transcription regulation by being recruited by NFE2 (By similarity). Plays an important role in controlling bulk H3K4me during oocyte growth and preimplantation development. Required during the transcriptionally active period of oocyte growth for the establishment and/or maintenance of bulk H3K4 trimethylation (H3K4me3), global transcriptional silencing that precedes resumption of meiosis, oocyte survival and normal zygotic genome activation. [UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (2) uses an alternate in-frame splice junction at the 5' end of an exon compared to variant 1. The resulting isoform (2) has the same N- and C-termini but is shorter compared to isoform 1.