

Product datasheet for **MG216265**

Kmt5b (NM_001167885) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Kmt5b (NM_001167885) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Kmt5b
Synonyms:	AA117471; C630029K18Rik; Suv4-20h1; Suv420h1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>MG216265 representing NM_001167885
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGAAGTGGTTGGGAGACTCCAAGAACATGGTGGTGAATGGCAGGAGAAATGGAGGCAAGTTGTCTAATG
 ACCATCAGCAGAATCAATCAAAATTACAGCAGCACTCGGGCAAGGACACCCTGAAGACCGCAGAAACGC
 CGTTGAGAGGCGGTCCAGCAGATGTCATGGTAACTCGGGATTTGAAGGGCAGAGCCGCTATGTGCCGTCC
 TCTGGAATGTCCGCCAAGGAGCTCTGTGAGAACGATGACTTAGCAACCAGTTTGGTTCTTGATCCCTACT
 TAGGTTTTTCAGACACACAAAATGAACACTAGCGCCTTTCTTCGAGGAGCTCGAGGCATATTTCAAAGC
 TGACAGTTTTTCTACAACAATCCTGTGAGATTTGCGCCTATAAAAGGAAGGCAAGAAGAGCTAAAGGAA
 GTAATTGAACGCTTAAGAAAGATGAACACTTAGAGAAAGCTTTCAAATGTTTGACTTCTGGGGAATGGG
 CACGGCATTATTTCTCAACAAAAACAAAATGCAGGAGAAATTTCAAGGAACATGTCTTTATTTACTT
 GCGGATGTTTGCAACTGACAGTGGATTTGAAATACTGCCTTGTAATAGATATTCTTCAGAACAAAATGGA
 GCCAAGATAGTTGCAACAAAAGAGTGAAACGAAATGACAAAATAGAATTACTGGTGGGTTGTATTGCCG
 AACTTTCAGAAATGAGGAGAACATGCTACTTAGACACGGAGAAAACGACTTCAGTGTATGTTCCAC
 AAGGAAAAATGTGCTCAACTCTGGCTCGGTCTGCTGCATTTATAAATCATGATTGCAGACCTAACTGT
 AAGTTTGTGCAACTGGTCGAGATACAGCATGCGTTAAGGCTCTGAGAGATATTGAACCTGGAGAAGAAA
 TTTCTTGTACTATGGAGATGGCTTTTTTGGAGAAAATAATGAGTTCTGCGAATGTTATACTTGTGAAAG
 ACGGGAACTGGTCTTTTAAATCACGAGTAGGACTGCCTGCGCCTGCTCCTGTTATCAATAGCAAAATAC
 GGACTTAGAGAAACAGATAAACGCTTAAATAGGCTTAAAAAGTTAGGTGACAGCAGCAAAAATCAGACA
 GTCAGTCTGTGAGTCTAACACAGATGCAGACCACTCAGGAAAAAGACAATGCAACTTAATCGAAA
 ATCTTCAGTTGGTGTGAAAAAGAGCAGCAAGAGTCGAGCTCTGACAAGGCCGTCCATGCCGAGAGTCCCG
 GCTGCTTCCAACCTACCTCACCAAGCTAGTGCACACCAACAATCCCGGGTACCAAAGAACTGAGAA
 AGCCGGCAAAGCCTTTACTCTCCAAGATCAGACTGCGGAATCACTGCAAGCGGCTGGACCAGAAGAGCGC
 ATCCCGCAAGCTCGAGATGGGGAGCTTAGTGCTTAAGGAGCCCAAAGTCGTGCTATATAAAAAATTTGCCA
 ATTAAGAAAGAAAGGGAGCCAGAGGGACCAGCCATGCTGCAGTGGGGAGTGGGTGCTTGACTAGACATG
 CTGCGAGAGAACACAGGCAGAATCATGGGAGAGGTGCTCATTGCGAGGGCGACAGTTGCCCTGCACCTA
 CACAACCCGGCGCTTTTGAGGACAAGGACAGGTCTGAAGGAGACCACTGACATCAAGCTTGAACCAAGT
 CCCTTGATGGCTATAAAAATGGTATACTGGAACCTTGCCAGACAGTGGCCAGCAGCAACCCAGAGG
 TGCTGGAAGAAGTGGCTCCTGAGACTGCACACAGGGAGGAAGCATCCAGGAGTGTCCCAAGAAGCAGCTC
 TGCTGTGCACGAAAGAAATTTGACAAGTGAACCTGTGAAACACTTAGCAAAGACCGAGGACTGCAGT
 CCAGAGCACAGCTCCCTGGGAAAGACGGGCTGCCAGATTTGCCAGGGTCTCATCTGATCAAGGTGAGC
 CCAGTGGCACAGTCAGGGTGCCCGTGAGCCACACGGACTCTGCTCCCTCACCGGTTGGCTGCTGTTGT
 CGCACCCGACAGCTTACAAAAGACAGCTTCAAACTGCACAAAGTAAAAAGAAGCGGGGTCACCAGG
 TACGATGCACAGCTGATCCTGGAGAACAGCTCTGGAATCCCAAGCTGACGCTTCGACGGCGGCACGACA
 GCAGCAGCAAGACAAACGACCATGAGAGTGACGGCGTGAACCTCCTCAAGATCAGCATCAAACCTAGCAA
 GGACCACGACAGTGACAGCAACCTCTATGTTGCCAAGCTCAGTAACGGGGTCAAGCAGGGCCGAGGAGG
 AGCTCCCAAGCTCAAGATCCAGCTCAAGCGGGATGAGGAGAGCAGGGGCCATGTGCAGAGGGCCTGC
 ACGAGAACGGGGTGTGCTGCAGCGACCCCTCTCCTGCTCGAGTCCAGATGGAGGTGGACGACTACAG
 TCAATATGAGGAGGACAGCACAGATGAATCCTCATCTTCTGAGGGGGAGGAGGAGGAGGACTGCGAG
 GATGACTTCGATGATGACTTCATTCCTCTCCTCCGGCAAAGCGGCTGAGGCTAATTGTTGGTAAAGACT
 CCATAGATATTGACATTTCTTCAAGGAGAAGAGAAGATCAGTCTCTAAGACTGAACGCA

ACGCGTACGCGGCCGCTCGAG – GFP Tag – **GTTTAA**

Protein Sequence: >MG216265 representing NM_001167885
 Red=Cloning site Green=Tags(s)

MKWLGDSKNMNVNRRNGGKLSNDHQNQSKLQQHSGKDTLKTGRNAVERRSSRCHGNSGFEGQSRVPS
 SGMSAKELCENDDLATSLVLDPYLGFQTHKMNTSAFPRSRRHISKADSFSHNNPVRFRPIKGRQEELKE
 VIERFKKDEHLEKAFKCLTSGEWARHYFLNKNKMQEKL FKEHVF IYLRMFATDSGFEILPCNRYSEQNG
 AKIVATKEWKRNDKIELLVGCI AELSEIEENMLLRHGENDFSVMYSTRKNCAQLWLGPAAFINHDCRPNC
 KFVSTGRDTACVKALRDI EPGEEI SCYYGDGFFGENNEFC EYTCERRGTGAFKSRVGLPAPAPVINSKY
 GLRETDKRLNRLKKGDSKNSDSQSVSSNTDADTTQEKNATSNRKSSVGVKSSKSRALTRPSMPRPV
 AASNSTSPKL VHTNPRVPKLRPAKPLL SKIRLRNHCKRLDQKSASRKLEMGSLVLPKPKVVL YKNLP
 IKKEREPEGPAHA AVSGCLTRHAAREHRQNHGRGAHSQGD SLPCTYTTTRSLRTRTGLKETT DIKLEPS
 PLDGYKNGI LEPD SGQQPTPEVLEELAPETAHREEASQ ECPKNSCLSRKKFRQVKPVKHLAKTEDCS
 PEHSFPGKGLPDLPGSHPDQGEPSGTVRVPVSH TDSAPSPVGC SVVAPDSFTKDSFRTAQSKKKRRVTR
 YDAQLILENSSGIPKLT LRRRHDS SSKTNDHESDGVNSSKISIKLSKDHDSDSNLYVAKLSNGVSAGPGS
 SSTKLIKQLKRDEESRGPCA EGLHENGVCSDPLS LLESQMEVDDYSQY EEDSTDESSSSEEEEEEDCE
 DDFDDDFIPLPPAKRRLIVGKDSIDIDISSRRREDQSLRLNA

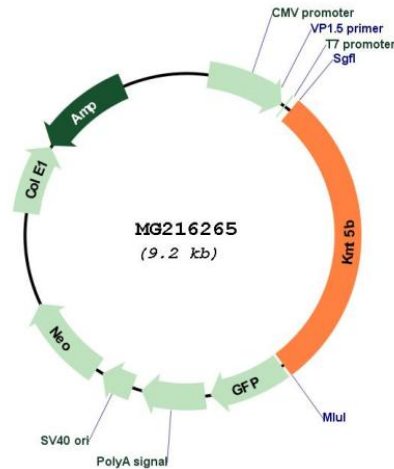
TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:


ACCN: NM_001167885

ORF Size: 2649 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_001167885.1](#), [NP_001161357.1](#)

RefSeq Size: 6131 bp

RefSeq ORF: 2652 bp

Locus ID: 225888

UniProt ID: [Q3U8K7](#)

Cytogenetics: 19 A

Gene Summary: Histone methyltransferase that specifically trimethylates 'Lys-20' of histone H4. H4 'Lys-20' trimethylation represents a specific tag for epigenetic transcriptional repression. Mainly functions in pericentric heterochromatin regions, thereby playing a central role in the establishment of constitutive heterochromatin in these regions. KMT5B is targeted to histone H3 via its interaction with RB1 family proteins (RB1, RBL1 and RBL2). Plays a role in myogenesis by regulating the expression of target genes, such as EID3.[UniProtKB/Swiss-Prot Function]