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Product datasheet for MG217766

Kmt5b (NM_144871) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Kmt5b (NM_144871) 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)

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ORF Nucleotide Sequence:

>MG217766 representing NM_144871
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAAGTGGTTGGGAGACTCCAAGAACATGGTGGTGAATGGCAGGAGAAATGGAGGCAAGTTGTCTAATG
ACCATCAGCAGAATCAATCAAAATTACAGCAGCACTCGGGCAAGGACACCCTGAAGACCGGCAGAAACGC
CGTTGAGAGGCGGTCCAGCAGATGTCATGGTAACTCGGGATTTGAAGGGCAGAGCCGCTATGTGCCGTCC
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TCCATAGATATTGACATTTCTTCAAGGAGAAGAGAAGATCAGTCTCTAAGACTGAACGCA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG217766 representing NM_144871
Red=Cloning site Green=Tags(s)

MKWLGDSKNMVVNGRRNGGKLSNDHQQNQSKLQQHSGKDTLKTGRNAVERRSSRCHGNSGFEGQSRYVPS
SGMSAKELCENDDLATSLVLDPYLGFQTHKMNTRFRPIKGRQEELKEVIERFKKDEHLEKAFKCLTSGEW
ARHYFLNKNKMQEKLFKEHVFIYLRMFATDSGFEILPCNRYSSEQNGAKIVATKEWKRNDKIELLVGCIA
ELSEIEENMLLRHGENDFSVMYSTRKNCAQLWLGPAAFINHDCRPNCKFVSTGRDTACVKALRDIEPGEE
ISCYYGDGFFGENNEFCECYTCERRGTGAFKSRVGLPAPAPVINSKYGLRETDKRLNRLKKLGDSSKNSD
SQSVSSNTDADTTQEKDNATSNRKSSVGVKKSSKSRALTRPSMPRVPAASNSTSPKLVHTNNPRVPKKLR
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AAREHRQNHGRGAHSQGDSLPCTYTTRRSLRTRTGLKETTDIKLEPSPLDGYKNGILEPCPDSGQQPTPE
VLEELAPETAHREEASQECPKNDSCLSRKKFRQVKPVKHLAKTEDCSPEHSFPGKDGLPDLPGSHPDQGE
PSGTVRVPVSHTDSAPSPVGCSVVAPDSFTKDSFRTAQSKKKRRVTRYDAQLILENSSGIPKLTLRRRHD
SSSKTNDHESDGVNSSKISIKLSKDHDSDSNLYVAKLSNGVSAGPGSSSTKLKIQLKRDEESRGPCAEGL
HENGVCCSDPLSLLESQMEVDDYSQYEEDSTDESSSSEGEEEEEDCEDDFDDDFIPLPPAKRLRLIVGKD
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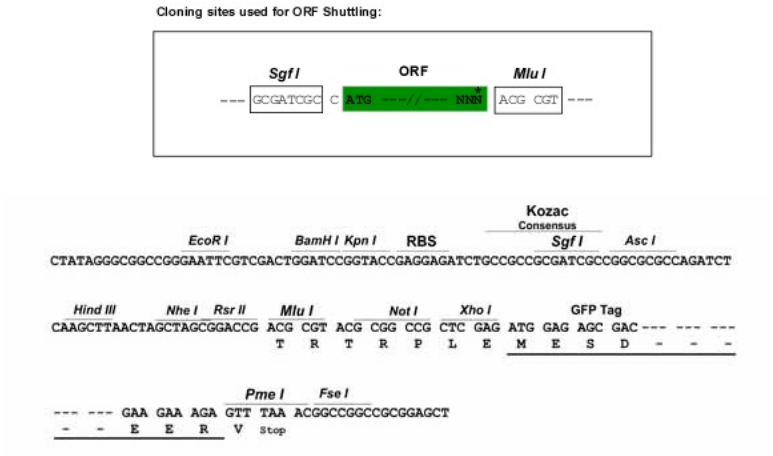
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN:	NM_144871
ORF Size:	2580 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_144871.4, NP_659120.3

RefSeq Size: 6062 bp

RefSeq ORF: 2583 bp

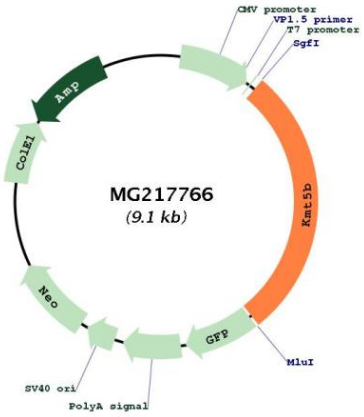
Locus ID: 225888

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]

Product images:



Circular map for MG217766