

Product datasheet for **MC203406**

Mettl16 (NM_026197) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Mettl16 (NM_026197) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Mettl16
Synonyms:	2610100D03Rik; 2810013M15Rik; A830095F14Rik; AI846133; Mett10d
Mammalian Cell Selection:	Neomycin
Vector:	PCMV6-Kan/Neo (PCMV6KN)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

Fully Sequenced ORF: >BC054724
 GGGCTTGGTGATTGCGGGCCTGTCCGCACTCCGTCGCTCCATTGGCCTGCGAGATGGCTCTAAGC
 AAATCAATGCATGCAAGAAATAGATACAAGGACAAACCACCTGACTTCGCATATCTGGCATCTAAATATC
 CAGATTTTAAGCAGCATATTCAGATAAATCTGAATGGGAGAGTAAGTCTTAATTTTAAAGACCCCGAAGC
 AGTCAGAGCTCTGACTTGTACTCTCCTGAGAGAGGACTTTGGACTTTCTATTGATATTCCTTTGGAGAGA
 CTAATTTCCACAGTCCCCTTGAGACTTAACTATATTTACTGGGTAGAAGATTTGATTGGTCACCAGGATT
 CGGACAAAACACTCTCCGAAGAGGAATTGACATAGGTACTGGGCATCCTGCATCTATCCCTTACTTTGG
 AGCAACCTTAAATGGCTGGTATTTCTGGCAACAGAAGTGGATGATATGTGTTTTCAATTATGCCAAGAAA
 AATGTAGAGCAGAATAACCTATCTGATCTCATTAAAGTGGTAAAAGTGCCGCGAGAAGACACTCCTGATGG
 ATGCGCTTAAGGAAGAGTCTGAGATAGTCTATGACTTCTGTATGTGCAACCCTCCCTTTTTTGGCAACCA
 ATTGGAAGCCAAGGGTGTAAATCCCGAATTCTCGAAGACCTCCACCTAGTTCTGTAACACCCGGGGGC
 ATCACAGAGATTATGGCAGAAGGAGGTGAGCTAGAATTTGTCAAAGGATCATCCATGACAGTTTACAGC
 TCAAAAAAAGGTTACGGTGGTATAGCTGTATGCTGGGAAAGAAATGCAGTCTGGCTCCACTGAAGGAAGA
 GCTTAGAATCCAAGGGGTTCTAAAGTCACCTTACAGAGTTTTGTGAGGGTCGGACAATGAGATGGGCC
 TTAGCTTGGAGTTTTTATGATGATGTCACAGTACCGTCACCTCCAAGTAAACGAAGAAAATTAGAAAAGC
 CAAGGAAACCCATTACTTTTGTAGTGTGGAGTCTGTGATGAAAGAATTGTCTCTCAAAGCTTCATCTTT
 GGGCTCCGAGACAGCGGAAGGCATAGTGGTTGTAACAACATGGATAGAAAAGATCCTGACTGATCTGAAG
 GTGCAACATAAGCGAATTCCTGTGGAAGAGAAGAAGTTAGCCTTTTCTGACAGCCATAGAAAACCTCTT
 GGATTCATTTAAGGCGGAAGAGAAGAGAGCGAGTGAGGCAGCTGCGGGAGGTGCCCGGGCTCCTGAGGA
 CGTCATCTTAGCCTTGAAGAGAGAAAGTCCACTCCCAAAGAGCTGAGTAGTGGCCAAGACGTGGCCAC
 AGCCCCAAGAGAGTGCCTGTGTGGGCTTGTGTGCCGGGCGGGGAGGCTGTGCTGATGGAGGCCATT
 GCCTCAGCCAGAAGTTACTGTGCCAGGAGGAGACTCCCGAGGCCACGGAGGATGAAAGGGATGAGGAAAG
 GGGAGGGATGGAGGCCATGGAAGTTGTAAGGCTCCAGCAATGGAGCCACGAGGAGGCTTCTGAG
 AAGGGGGATCGCCTGGATGGGGCGGCGGACGCTACCTGTTAAGTGTGTTAGTCAACATTAAGAAGGAAG
 CTGGCGATGCCGTGGTTGAAATGCATTGGGTTGAGGGCCAGAATAGGGATTTGATGAACCAGCTTTGCAC
 TTACGTACGTAACCAAATTTGAGGCTTGTGCTAGTTAATTCTTAATTTCTTCTCAGTTAGAAAAGTG
 ATGTATGGGGCTAGGGATATGATGCAATGACCTTATGTGCTTAGTATCCAGAAGTTACCCTGTGTTGAGT
 CCCTTACATCTAACATCATTACAAGAAAAAAAAAAAAACCCATATTATAAAATAGCTTGCTTTGGAGGTAGA
 GCCTATTGGGAGGCCAGCAGAATTTACCCTGGTCCATGAGTGACACCATGTGGAATCTCTTTAAAAAA
 ACACAAAATTTAGTTGGATGTGCTCTGTGGCACTTGTAAACCCACTACTTGGAGGCAAAGGCAGGAAGATG
 GCTATGGGTGTAAGGGCAGCCTGTGCTACAGAGACAGACTCGTCTAAATAAAAAGAAGGAAAAAGGAA
 AGCAGCAGTGGATCCATTTTAAACCCTTCCCTCTTACAGCAGCTAAACCTAGGAGGAGCAGATCATCG
 CAGCCAAAGGCCAGAGGGGCTCTGGTGGCATCTGGTGTGGGTGAGGGCTGCCTAGAAAAGTGTCTGTACC
 AAGGGTTGCTTGGTGACAAGGGCAACAGTGTCTCCAGTGAGGCTCCTGCTCATGGCTGCCTTCAAGATA
 TCTGCTTTCTCAAGGAAACAGAAATTGAGCGAGCTGGTTCCAGAAAGGAGCTAGCCTGTTGATAGGTGAC
 GAGAGTGTGAGGAGAGTCTATCTAGTCGAGCCAAAGGAGAGGGCTGTCTGGGGAACACACAGGAAGCTG
 CACGTTTACCGCCACCCTATTCTGACATTGCCTATTTTCAAGAACAGAGTTGATAAGCAAACTCTGAG
 ATGTAGCTGAGGCACAATAAAGTGTACCCACCAACCCACCGACAGCATTGTTTTGTAACAATTGTACTGC
 CTTTTTTTTTAAATGTGAAATGGAATCTTTGGTTTTTAAATAAAGACTTAATAATTGAAAAAAAAAAAAA AAAAAAAAAAAAAA

- Restriction Sites:** Ascl-NotI
- ACCN:** NM_026197
- Insert Size:** 1662 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: [BC054724](#), [AAH54724](#)

RefSeq Size: 2672 bp

RefSeq ORF: 1662 bp

Locus ID: 67493

UniProt ID: [Q9CQG2](#)

Cytogenetics: 11 B5

Gene Summary: RNA N6-methyltransferase that methylates adenosine residues at the N(6) position of a subset of RNAs and is involved in S-adenosyl-L-methionine homeostasis by regulating expression of MAT2A transcripts (PubMed:29262316, PubMed:30197299). Able to N6-methylate a subset of mRNAs and U6 small nuclear RNAs (U6 snRNAs) (By similarity). In contrast to the METTL3-METTL14 heterodimer, only able to methylate a limited number of RNAs: requires both a 5'UACAGAGAA-3' nonamer sequence and a specific RNA structure (By similarity). Plays a key role in S-adenosyl-L-methionine homeostasis by mediating N6-methylation of MAT2A mRNAs, altering splicing and/or stability of MAT2A transcripts: in presence of S-adenosyl-L-methionine, binds the 3' UTR region of MAT2A mRNA and specifically N6-methylates the first hairpin of MAT2A mRNA, impairing MAT2A expression (PubMed:29262316, PubMed:30197299). In S-adenosyl-L-methionine-limiting conditions, binds the 3' UTR region of MAT2A mRNA but stalls due to the lack of a methyl donor, preventing N6-methylation and promoting expression of MAT2A (PubMed:29262316). In addition to mRNAs, also able to mediate N6-methylation of U6 small nuclear RNA (U6 snRNA): specifically N6-methylates adenine in position 43 of U6 snRNAs (By similarity). Also able to bind various lncRNAs (By similarity). Specifically binds the 3'-end of the MALAT1 long non-coding RNA (By similarity) (PubMed:29262316, PubMed:30197299).[UniProtKB/Swiss-Prot Function]