

Product datasheet for **SC317966**

METT10D (METTL16) (NM_024086) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	METT10D (METTL16) (NM_024086) Human Untagged Clone
Tag:	Tag Free
Symbol:	METTL16
Synonyms:	METT10D
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

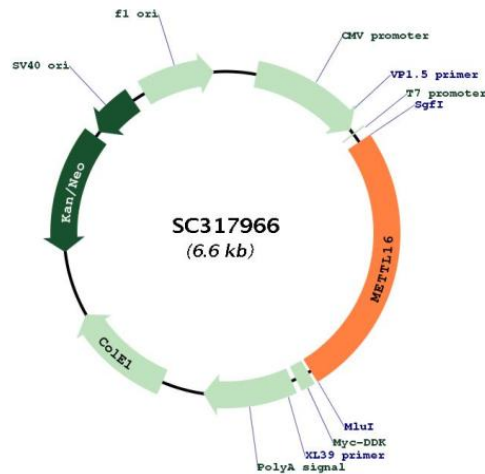


[View online »](#)

Fully Sequenced ORF: >SC317966 representing NM_024086.
Blue=Insert sequence Red=Cloning site Green=Tag(s)

```
GCTCGTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGCTCTGAGTAAATCAATGCATGCAAGAAATAGATACAAGGACAAACCTCCTGACTTTGCATATCTG
GCATCCAATATCCAGATTTTAAGCAGCATGTTTCAGATAAATCTGAATGGAAGAGTGAGCCTTAATTTT
AAAGACCCCGAAGCAGTCAGAGCTCTGACGTGTACTCTCCTAAGGGAAGATTTTGGACTTTCTATTGAT
ATTCCATTGGAGAGACTAATCCACAGATTCCCTTGAGACTCACTATATTCACTGGGTAGAAGATCTG
ATCGGTACCAGGATTCTGACAAAAGTACTCTCCGAAGAGGAATTGACATAGGCACGGGGGCATCTTGC
ATCTACCCCTTACTTGGAGCAACCTTGAATGGCTGGTATTTCTCGCAACAGAAGTGGATGATATGTGT
TTCAACTATGCAAAGAAAAATGTGGAACAGAATAAATTATCTGATCTCATAAAAGTGGTAAAGTGCCA
CAGAAGACTCCTGATGGATGCTCTTAAAGAAGAATCTGAGATAATCTATGACTTTTGCATGTGCAAC
CCTCCCTTTTTGCCAATCAATTGGAAGCCAAGGGAGTAACTCACGAAATCCTCGAAGACTCCGCT
AGTTCTGTAAATACAGGAGGCATCACAGAGATCATGGCAGAAGGAGGTGAATTAGAGTTTGTAAAAGG
ATCATCCATGACAGTCTACAACCTAAAAAAGATTAAGATGGTATAGCTGCATGCTGGGAAAGAAATGC
AGCCTGGCGCCTCTGAAGGAGGAGCTTCGCATACAAGGGTTCCTCAAAGTAACTGACTGAATTCGT
CAAGGTCCGACAATGAGATGGGCCTTAGCTTGGAGTTTTATGATGATGTACAGTACCATCACCACCA
AGTAAGCGAAGAAAATTAGAGAAACCGAGAAAACCCATAACATTCGTGGTGTGCGTCCGATGAG
GAATTATCCCTCAAAGCATCACCTCTGCGCTCGGAGACGGCGGAAGGCATAGTCGTTGTCACGACATGG
ATTGAAAAATTTCTACTGATTTGAAGGTCCAGCATAAACGATTCCTGTGGAAAAGAGGAAGTCAGC
CTTTTCTAACGGCCATAGAAAATCCTGGATTCATTTAAGGAGAAAAGAGAGCGGTGAGACAG
CTGAGAGAAGTTCCCGAGCTCCTGAGGACGTCAATTCAGGCCTTGAAGAGAAAAGCCACCCCAA
GAGTCTGGCAATAGCCAAGAAGTGGCCAGGGGCCCCAGGAGAGGACCCCTGTGGCCTGCTCTGCGG
GAAGGCGAGGCTGCCGCTGTGGAGGGCCGTGCCGAGCCAGGAGTCCCTGTCCAGGAGAAAACCCG
GAACCCACGGAGGATGAAAGGAGTGAGGAAAAGGGAGGGTGGAGGTTTTGAAAAGTTGTCAAGGCTCT
AGCAACGGAGCCAGGACCAAGAGGCTTCTGAGCAGTTCGGCAGCCAGTGGCTGAAAGGGGAAACGT
CTCCAGGAGTGGCCGGACAGTACCTGTTAAGTGTGATAAACGTTAAGAAGGAGGTGGACGATGCC
TTAGTGGAGATGCACTGGGTTGAGGGCCAGAACAGGGATCTGATGAACCAGCTTTGCACCTACATACGT
AACCAATTTTCAGGCTTGTTCAGTAACTAG
ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTAAACGGCCGCGC
```

Restriction Sites: SgfI-MluI

Plasmid Map:


ACCN: NM_024086

Insert Size: 1689 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).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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_024086.3](#)

RefSeq Size: 5758 bp

RefSeq ORF: 1689 bp

Locus ID: 79066

UniProt ID: [Q86W50](#)

Cytogenetics: 17p13.3

MW: 63.6 kDa

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:28525753, PubMed:30197299, PubMed:30197297). Able to N6-methylate a subset of mRNAs and U6 small nuclear RNAs (U6 snRNAs) (PubMed:28525753). 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 (PubMed:28525753, PubMed:30197299, PubMed:30197297). 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:28525753). 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:28525753). 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 (PubMed:28525753, PubMed:29051200). Also able to bind various lncRNAs (PubMed:29051200). Specifically binds the 3'-end of the MALAT1 long non-coding RNA (PubMed:27872311).[UniProtKB/Swiss-Prot Function]