

## Product datasheet for **RC208648L3V**

### **METT10D (METTL16) (NM\_024086) Human Tagged ORF Clone Lentiviral Particle**

#### **Product data:**

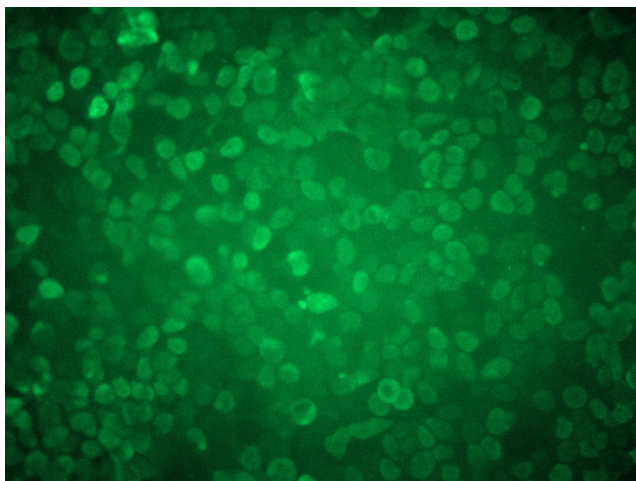
Product Type:	Lentiviral Particles
Product Name:	METT10D (METTL16) (NM_024086) Human Tagged ORF Clone Lentiviral Particle
Symbol:	METT10D
Synonyms:	METT10D
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-Myc-DDK-P2A-Puro (PS100092)
Tag:	Myc-DDK
ACCN:	NM_024086
ORF Size:	1686 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC208648).
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. <a href="#">More info</a>
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
RefSeq:	<a href="#">NM_024086.3</a> , <a href="#">NP_076991.3</a>
RefSeq Size:	5758 bp
RefSeq ORF:	1689 bp
Locus ID:	79066
UniProt ID:	<a href="#">Q86W50</a>
Cytogenetics:	17p13.3
MW:	63.6 kDa



[View online »](#)

**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]

**Product images:**

[RC208648L3] was used to prepare Lentiviral particles using [TR30037] packaging kit. HEK293T cells were transduced with RC208648L3V particle to overexpress human METTL16-Myc-DDK fusion protein.