

Product datasheet for MR208777L4V

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Mettl16 (NM_026197) Mouse Tagged ORF Clone Lentiviral Particle

Product data:

Product Type: Lentiviral Particles

Product Name: Mettl16 (NM 026197) Mouse Tagged ORF Clone Lentiviral Particle

Symbol: Mettl16

Synonyms: 2610100D03Rik; 2810013M15Rik; A830095F14Rik; Al846133; Mett10d

Mammalian Cell

Selection:

Puromycin

Vector: pLenti-C-mGFP-P2A-Puro (PS100093)

Tag: mGFP

ACCN: NM_026197 **ORF Size:** 1662 bp

ORF Nucleotide

Sequence:

The ORF insert of this clone is exactly the same as(MR208777).

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.

RefSeg: NM 026197.1

 RefSeq Size:
 2718 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 N6methylate 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 N6methylation 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 IncRNAs (By similarity). Specifically binds the 3'-end of the MALAT1 long noncoding RNA (By similarity) (PubMed:29262316, PubMed:30197299).[UniProtKB/Swiss-Prot Function]