

Product datasheet for TP508777

OriGene Technologies, Inc.

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Mettl16 (NM_026197) Mouse Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Purified recombinant protein of Mouse methyltransferase like 16 (Mettl16), with C-terminal

MYC/DDK tag, expressed in HEK293T cells, 20ug

Species: Mouse Expression Host: HEK293T

Expression cDNA >MR208777 protein sequence Clone or AA Sequence: Red=Cloning site Green=Tags(s)

MALSKSMHARNRYKDKPPDFAYLASKYPDFKQHIQINLNGRVSLNFKDPEAVRALTCTLLREDFGLSIDI PLERLIPTVPLRLNYIHWVEDLIGHQDSDKTTLRRGIDIGTGASCIYPLLGATLNGWYFLATEVDDMCFN YAKKNVEQNNLSDLIKVVKVPQKTLLMDALKEESEIVYDFCMCNPPFFANQLEAKGVNSRNSRRPPPSSV NTGGITEIMAEGGELEFVKRIIHDSLQLKKRLRWYSCMLGKKCSLAPLKEELRIQGVPKVTFTEFCQGRT MRWALAWSFYDDVTVPSPPSKRRKLEKPRKPITFVVLESVMKELSLKASSLGSETAEGIVVVTTWIEKIL TDLKVQHKRIPCGREEVSLFLTAIENSWIHLRRKRRERVRQLREVPRAPEDVILALEERKSTPKELSSGQ DVAHSPQESALCGLDVPGGEAAADGGHCLSQKLLCQEETPEATEDERDEERGGMEAMESCKGSSNGAQDG

EASEKGDRLDGAAGRYLFKCLVNIKKEAGDAVVEMHWVEGQNRDLMNQLCTYVRNQILRLVAS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-MYC/DDK

Predicted MW:

Concentration: >0.05 μg/μL as determined by microplate BCA method

Purity: > 80% as determined by SDS-PAGE and Coomassie blue staining

Buffer: 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

Note: For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C after receiving vials.

62.8 kDa

Stability: Stable for 12 months from the date of receipt of the product under proper storage and handling

conditions. Avoid repeated freeze-thaw cycles.

RefSeg: NP 080473





RefSeq ORF:

Mettl16 (NM_026197) Mouse Recombinant Protein - TP508777

Locus ID: 67493

UniProt ID:Q9CQG2RefSeq Size:2718Cytogenetics:11 B5

1662

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

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 IncRNAs (By similarity). Specifically binds the 3'-end of the MALAT1 long non-coding RNA (By similarity) (PubMed:29262316, PubMed:30197299).

[UniProtKB/Swiss-Prot Function]