

## Product datasheet for **TP308648L**

### **METT10D (METTL16) (NM\_024086) Human Recombinant Protein**

#### Product data:

**Product Type:** Recombinant Proteins

**Description:** Recombinant protein of human methyltransferase 10 domain containing (METT10D), 1 mg

**Species:** Human

**Expression Host:** HEK293T

**Expression cDNA Clone or AA Sequence:** >RC208648 protein sequence  
**Red**=Cloning site **Green**=Tags(s)

MALSKSMHARNRYKDKPPDFAYLASKYPDFKQHVQINLNGRVSLNFKDPEAVRALTCTLLREDFGLSIDI  
PLERLIPTVPLRLNYIHWVEDLIGHQSDKSTLRRGIDIGTGASCIYPLLGATLNGWYFLATEVDDMCFN  
YAKKNVEQNNLSDLIKVVKVPQKTLMDALKEESEIYDFCMCNPPFFANQLEAKGVNSRNRPPSSV  
NTGGITEIMAEGGELEFVKRIIHDSLQKKRLRWYSCMLGKKCSLAPLKEELRIQGVPKVITYTEFCQGR  
MRWALAWSFYDDVTVSPSPSKRRKLEKPRKPITFVWLASVMKELSLKASPLRSETAEGIVVTTWIEKIL  
TDLKVQHKRVP CGKEEVSLFLTAIENSWIHLRRKKRERVRQLREVPRAPEDVIQALEEKKPTPKESGNSQ  
ELARGPQERTPCGPALREGEAAVEGPCPSQESLSQEENPEPTEDERSEEKGGVEVLENCQGSNGAQDQ  
EASEQFGSPVAER GKRLPGVAGQYLFKCLINVKKEVDDALVEMHWVEGQNRDLMNQLCTYIRNQIFRLVA  
VN

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

**Tag:** C-Myc/DDK

**Predicted MW:** 63.4 kDa

**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

**Preparation:** Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.

**Note:** For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.

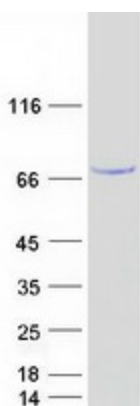
**Storage:** Store at -80°C.



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|----------------------|---|
| <b>Stability:</b>    | Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.   |
| <b>RefSeq:</b>       | <a href="#">NP_076991</a>   |
| <b>Locus ID:</b>     | 79066   |
| <b>UniProt ID:</b>   | <a href="#">Q86W50</a>  |
| <b>RefSeq Size:</b>  | 5758  |
| <b>Cytogenetics:</b> | 17p13.3   |
| <b>RefSeq ORF:</b>   | 1686  |
| <b>Synonyms:</b>     | METT10D   |
| <b>Summary:</b>      | <p>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]</p> |

## Product images:



Coomassie blue staining of purified METTL16 protein (Cat# [TP308648]). The protein was produced from HEK293T cells transfected with METTL16 cDNA clone (Cat# [RC208648]) using MegaTran 2.0 (Cat# [TT210002]).