

Product datasheet for PH308648

METT10D (METTL16) (NM_024086) Human Mass Spec Standard

Product data:

Product Type:	Mass Spec Standards
Description:	METT10D MS Standard C13 and N15-labeled recombinant protein (NP_076991)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC208648
Predicted MW:	63.6 kDa
Protein Sequence:	>RC208648 protein sequence Red=Cloning site Green=Tags(s)

MALSKSMHARNRYKDKPPDFAYLASKYPDFKQHVQINLNGRVSLNFKDPEAVRALTCTLLREDFGLSIDI
PLERLIPTVPLRLNYIHWVEDLIGHQSDSKSTLRRGIDIGTGASCIYPLLGATLNGWYFLATEVDDMCFN
YAKKNVEQNNLSDLIKVVKVPQKTLMDALKEESEIIYDFCMCNPPFFANQLEAKGVNSRNP RPSSV
NTGGITEIMAEGGELEFVKRIIHDSLQKRLRWYSCMLGKKCSLAPLKEELRIQGVPKVITYTEFCQGR
MRWALAWSFYDDVTVPSPSKRRKLEKPRKPIFVVLASVMKELSLKASPLRSETAEGIVVTTWIEKIL
TDLKVQHKRVPCGKEEVSLFLTAIENSWIHLRRKKRERVRLREVPRAPEDVIQALEEKKPTPKESGNSQ
ELARGPQERTPCGPALREGEAAVEGPCPSQESLSQEENPEPTEDERSEEKGGVELENCQSSNGAQDQ
EASEQFGSPVAERGRKRLPGVAGQYLFKCLINVKKEVDDALVEMHWVEGQNRDLMNQLCTYIRNQIFRLVA
VN

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- ¹³ C ₆ , ¹⁵ N ₄]-L-Arginine and [U- ¹³ C ₆ , ¹⁵ N ₂]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	NP_076991
RefSeq Size:	5758
RefSeq ORF:	1686



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Synonyms: METT10D

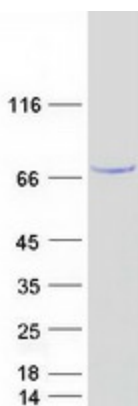
Locus ID: 79066

UniProt ID: [Q86W50](#)

Cytogenetics: 17p13.3

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:



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]).