

MET10 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP10007B

Product Information

Application	IHC-P, WB, E
Primary Accession	<u>Q86W50</u>
Other Accession	<u>NP_076991.3</u>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB27551
Calculated MW	63621
Antigen Region	444-472

Additional Information

Gene ID	79066
Other Names	Methyltransferase-like protein 16, 211-, Methyltransferase 10 domain-containing protein, METTL16, METT10D
Target/Specificity	This MET10 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 444-472 amino acids from the C-terminal region of human MET10.
Dilution	IHC-P~~1:100 WB~~1:2000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	MET10 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	METTL16 {ECO:0000303 PubMed:27872311, ECO:0000312 HGNC:HGNC:28484}
Function	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:30197297, PubMed:30197299, PubMed:<u>33428944</u>, PubMed:<u>33930289</u>). 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:30197297, PubMed:<u>30197299</u>). Plays a key role in S-adenosyl-L-methionine homeostasis by mediating N6- methylation of MAT2A mRNAs, altering splicing 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, preventing recognition of their 3'-splice site by U2AF1/U2AF35, thereby inhibiting splicing and protein production of S-adenosylmethionine synthase (PubMed:28525753, PubMed:33930289). In S-adenosyl-Lmethionine-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:<u>28525753</u>, PubMed:<u>29051200</u>, PubMed:<u>32266935</u>). Also able to bind various IncRNAs, such as 7SK snRNA (7SK RNA) or 7SL RNA (PubMed: 29051200). Specifically binds the 3'-end of the MALAT1 long non-coding RNA (PubMed:27872311).

Cellular Location

Nucleus. Cytoplasm

Images



MET10 Antibody (C-term) (Cat. #AP10007b) western blot analysis in mouse bladder tissue lysates (15ug/lane).This demonstrates the MET10 antibody detected MET10 protein (arrow).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.