

**METTL4 Antibody (C-term) Blocking peptide**  
**Synthetic peptide**  
**Catalog # BP10377b****Specification**

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**METTL4 Antibody (C-term) Blocking peptide - Product Information**

Primary Accession [O8N3J2](#)  
Other Accession [NP\\_073751.3](#)

**METTL4 Antibody (C-term) Blocking peptide - Additional Information**

**Gene ID** 64863

**Other Names**

Methyltransferase-like protein 4, 211-, METTL4

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**METTL4 Antibody (C-term) Blocking peptide - Protein Information**

**Name** METTL4 {ECO:0000303|PubMed:31913360, ECO:0000312|HGNC:HGNC:24726}

**Function**

N(6)-adenine-specific methyltransferase that can methylate both RNAs and DNA (PubMed:<a href="http://www.uniprot.org/citations/31913360" target="\_blank">31913360</a>, PubMed:<a href="http://www.uniprot.org/citations/32183942" target="\_blank">32183942</a>). Acts as a N(6)-adenine-specific RNA methyltransferase by catalyzing formation of N6,2'-O-dimethyladenosine (m6A(m)) on internal positions of U2 small nuclear RNA (snRNA): methylates the 6th position of adenine residues with a pre-deposited 2'-O-methylation (PubMed:<a href="http://www.uniprot.org/citations/31913360" target="\_blank">31913360</a>). Internal m6A(m) methylation of snRNAs regulates RNA splicing (PubMed:<a href="http://www.uniprot.org/citations/31913360" target="\_blank">31913360</a>). Also able to act as a N(6)-adenine-specific DNA methyltransferase by mediating methylation of DNA on the 6th position of adenine (N(6)-methyladenosine) (PubMed:<a href="http://www.uniprot.org/citations/32183942" target="\_blank">32183942</a>). The existence of N(6)-methyladenosine (m6A) on DNA is however unclear in mammals, and additional evidences are required to confirm the role of the N(6)-adenine-specific DNA methyltransferase activity of METTL4 in vivo (PubMed:<a href="http://www.uniprot.org/citations/32203414" target="\_blank">32203414</a>). Acts as a regulator of mitochondrial transcript levels and mitochondrial DNA (mtDNA) copy number by mediating mtDNA N(6)-methylation: m6A on mtDNA

reduces transcription by repressing TFAM DNA-binding and bending (PubMed:<a href="http://www.uniprot.org/citations/32183942" target="\_blank">32183942</a>). N(6)-methyladenosine deposition by METTL4 regulates Polycomb silencing by triggering ubiquitination and degradation of sensor proteins ASXL1 and MPND, leading to inactivation of the PR-DUB complex and subsequent preservation of Polycomb silencing (By similarity).

**Cellular Location**

Nucleus. Cytoplasm, cytosol. Mitochondrion matrix

**METTL4 Antibody (C-term) Blocking peptide - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

**METTL4 Antibody (C-term) Blocking peptide - Images****METTL4 Antibody (C-term) Blocking peptide - References**

Trevino, L.R., et al. Nat. Genet. 41(9):1001-1005(2009)