

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

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:31913360, PubMed:32183942). 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:31913360). Internal m6A(m) methylation of snRNAs regulates RNA splicing (PubMed:31913360). 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:32183942). 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:32203414). 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:32183942). 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)