

METTL4 Antibody (C-term) Blocking peptide

Synthetic peptide Catalog # BP10377b

Specification

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

Primary Accession <u>Q8N3J2</u>
Other Accession <u>NP 073751.3</u>

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

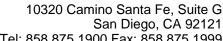
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

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





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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)