

Datasheet for ABIN7549401  
**METTL4 Protein (AA 1-472) (His tag)**



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## Overview

Quantity:	1 mg
Target:	METTL4
Protein Characteristics:	AA 1-472
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This METTL4 protein is labelled with His tag.

## Product Details

Purpose:	Custom-made recombinant METTL4 Protein expressed in mammalian cells.
Sequence:	MSVVHQLSAG WLLDHLFIN KINYQLHQHH EPCCRKKEFT TSVHFESLQM DSVSSSGVCA AFIASDSSTK PENDDGGNYE MFTRKFVFRP ELFDVTKPYI TPAVHKECQQ SNEKEDLMNG VKKEISISII GKRRKRCVVF NQGELDAMEY HTKIRELILD GSLQLIQEGL KSGFLYPLFE KQDKGSKPIT LPLDACSLSE LCEMAKHLPS LNEMEHQTLQ LVEEDTSVTE QDLFLRVVEN NSSFTKVITL MGQKYLLPPK SSFLLSDISC MQPLLNYRKT FDVIVIDPPW QNKSVKRSNR YSYLSPLQIQ QIPIPKLAAP NCLLVTWVTN RQKHLRFIKE ELYPSWSVEV VAEWHWVKIT NSGEFVPLD SPHKKPYEGL ILGRVQEKTA LPLRNADVNV LPIPDHKLIV SVPCTLHSHK PPLAEVLKDY IKPDGEYLEL FARNLQPGWT SWGNEVLKFQ HVDYFIAVES GS <b>Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.</b>
Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different

## Product Details

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isoform, please contact us regarding an individual offer.

### Characteristics:

#### Key Benefits:

- Made to order protein - from design to production - by highly experienced protein experts.
- Protein expressed in mammalian cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

If you are not interested in a full length protein, please contact us for individual protein fragments.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

### Purity:

> 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)

### Grade:

custom-made

## Target Details

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### Target:

METTL4

### Alternative Name:

METTL4 ([METTL4 Products](#))

### Background:

N(6)-adenine-specific methyltransferase METTL4 (Methyltransferase-like protein 4) (N(6)-adenine-specific DNA methyltransferase METTL4) (EC 2.1.1.72) (snRNA (2'-O-methyladenosine-N(6)-)-methyltransferase METTL4) (EC 2.1.1.-),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

## Target Details

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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).  
{ECO:0000250|UniProtKB:Q3U034, ECO:0000269|PubMed:31913360, ECO:0000269|PubMed:32183942, ECO:0000269|PubMed:32203414}.

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Molecular Weight: 54.0 kDa

UniProt: [Q8N3J2](#)

## Application Details

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Application Notes: We expect the protein to work for functional studies. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Restrictions: For Research Use only

## Handling

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Format: Liquid

Buffer: The buffer composition is at the discretion of the manufacturer.

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: 12 months