

Datasheet for ABIN7554567

**METTL14 Protein (AA 1-456) (His tag)**[Go to Product page](#)

## Overview

Quantity:	1 mg
Target:	METTL14
Protein Characteristics:	AA 1-456
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This METTL14 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

## Product Details

Purpose:	Custom-made recombinat METTL14 Protein expressed in mammalian cells.
Sequence:	MDSRLQEIRE RQKLRRQLLA QQLGAESADS IGAVLNSKDE QREIAETRET CRASYDTSAP NAKRKYLDEG ETDEDKMEEY KDELEMQQDE ENLPYEEIY KDSSTFLKGT QSLNPHNDYC QHFDVTGHRP QNFIRDVGLA DRFEEYPKLR ELIRLKDELI AKSNTPPMYL QADIEAFDIR ELTPKFDVIL LEPPLEYYR ETGITANEKC WTWDDIMKLE IDEIAAPRSF IFLWCGSGEG LDLGRVCLRK WGYRRCEDIC WIKTNKNNPG KTKTLDPKAV FQRTKEHCLM GIKGTVKRST DGDFIHANVD IDLIITEEPE IGNIKPV EI FHIIEHFCLG RRRLHLFGRD STIRPGWLTV GPTLTNSNYN AETYASYFSA PNSYLTGCTE EIERLRPKSP PPKSKSDRGG GAPRGGGRGG TSAGRGRERN RSNFRGERGG FRGGRGGAHR GGFPPR <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>

## Product Details

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### 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.

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### Purity:

> 90 % as determined by Bis-Tris Page, Western Blot

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### Grade:

custom-made

## Target Details

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### Target:

METTL14

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### Alternative Name:

METTL14 ([METTL14 Products](#))

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### Background:

N6-adenosine-methyltransferase non-catalytic subunit (Methyltransferase-like protein 14) (hMETTL14),FUNCTION: The METTL3-METTL14 heterodimer forms a N6-methyltransferase complex that methylates adenosine residues at the N(6) position of some mRNAs and regulates the circadian clock, differentiation of embryonic stem cells and cortical neurogenesis (PubMed:24316715, PubMed:24407421, PubMed:25719671, PubMed:29348140, PubMed:27373337, PubMed:27281194). In the heterodimer formed with METTL3, METTL14 constitutes the RNA-binding scaffold that recognizes the substrate rather than the catalytic core (PubMed:27627798, PubMed:27373337, PubMed:27281194, PubMed:29348140). N6-methyladenosine (m6A), which takes place at the 5'-[AG]GAC-3' consensus sites of some mRNAs, plays a role in mRNA stability and processing (PubMed:24316715, PubMed:24407421, PubMed:25719671). M6A acts as a key regulator of mRNA stability by promoting mRNA destabilization and degradation (By similarity). In embryonic stem cells (ESCs), m6A methylation of mRNAs encoding key naive pluripotency-promoting transcripts results in

## Target Details

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transcript destabilization (By similarity). M6A regulates spermatogonial differentiation and meiosis and is essential for male fertility and spermatogenesis (By similarity). M6A also regulates cortical neurogenesis: m6A methylation of transcripts related to transcription factors, neural stem cells, the cell cycle and neuronal differentiation during brain development promotes their destabilization and decay, promoting differentiation of radial glial cells (By similarity).

{ECO:0000250|UniProtKB:Q3UIK4, ECO:0000269|PubMed:24316715, ECO:0000269|PubMed:24407421, ECO:0000269|PubMed:25719671, ECO:0000269|PubMed:27281194, ECO:0000269|PubMed:27373337, ECO:0000269|PubMed:27627798, ECO:0000269|PubMed:29348140}.

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Molecular Weight: 52.2 kDa

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UniProt: [Q9HCE5](#)

## Application Details

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Application Notes: In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

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Restrictions: For Research Use only

## Handling

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Format: Liquid

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

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Handling Advice: Avoid repeated freeze-thaw cycles.

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Storage: -80 °C

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Storage Comment: Store at -80°C.

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Expiry Date: 12 months