




## Product datasheet

# Anti-METTL14 antibody [CL4254] ab220031

[1 References](#) [7 Images](#)

### Overview

<b>Product name</b>	Anti-METTL14 antibody [CL4254]
<b>Description</b>	Mouse monoclonal [CL4254] to METTL14
<b>Host species</b>	Mouse
<b>Tested applications</b>	<b>Suitable for:</b> IHC-P, WB, ICC/IF
<b>Species reactivity</b>	<b>Reacts with:</b> Human <b>Predicted to work with:</b> Mouse, Chicken, Cow, Orangutan 
<b>Immunogen</b>	Recombinant fragment (proprietary-tag) corresponding to Human METTL14 aa 1-100. Database link: <a href="#">Q9HCE5</a>  <a href="#">Run BLAST with</a>  <a href="#">Run BLAST with</a>
<b>Positive control</b>	Human endometrium, Human testis, Human fallopian tubes, Human prostate and Human duodenum tissues; A431 cell line lysate. ICC/IF: RH-30 cells
<b>General notes</b>	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&amp;As</p>

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	pH: 7.20 Preservative: 0.02% Sodium azide Constituents: 40% Glycerol (glycerin, glycerine), 59% PBS
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	CL4254

Isotype

IgG1

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab220031 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		1/500 - 1/1000. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
WB		1/500 - 1/1000. Predicted molecular weight: 52 kDa.
ICC/IF		Use a concentration of 2 - 10 µg/ml.

## Target

### Function

N6-methyltransferase that methylates adenosine residues of some mRNAs and acts as a regulator of the circadian clock and differentiation of embryonic stem cells. N6-methyladenosine (m6A), which takes place at the 5'-[AG]GAC-3' consensus sites of some mRNAs, plays a role in the efficiency of mRNA splicing, processing and mRNA stability (PubMed:24316715, PubMed:24407421, PubMed:25719671). M6A regulates the length of the circadian clock: acts as a early pace-setter in the circadian loop. M6A also acts as a regulator of mRNA stability: in embryonic stem cells (ESCs), m6A methylation of mRNAs encoding key naive pluripotency-promoting transcripts results in transcript destabilization.

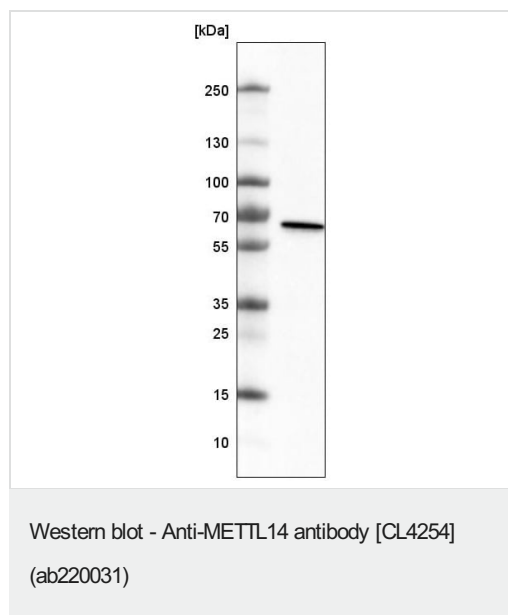
### Sequence similarities

Belongs to the MT-A70-like family.

### Cellular localization

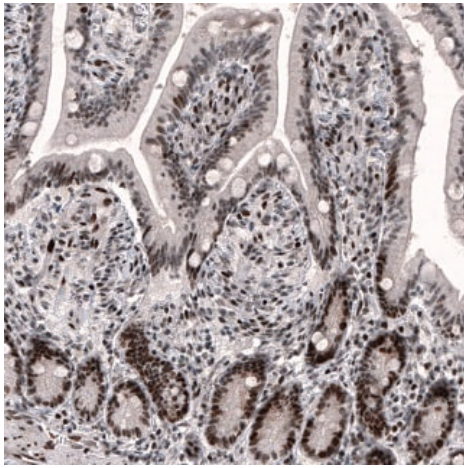
Nucleus.

## Images



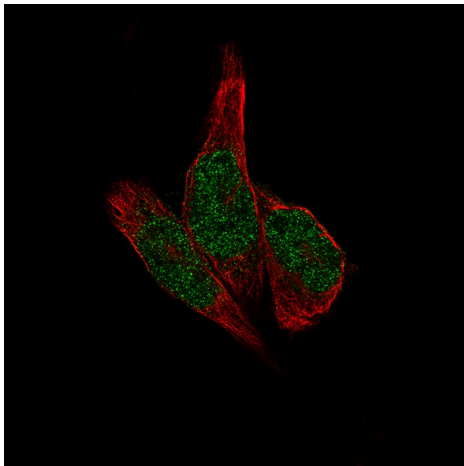
Anti-METTL14 antibody [CL4254] (ab220031) at 1/500 dilution + A431 cell line lysate

**Predicted band size:** 52 kDa



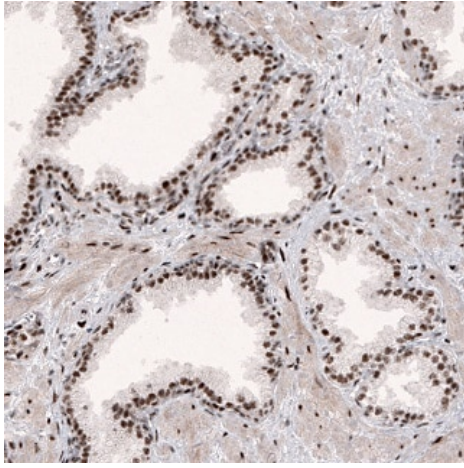
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-METTL14 antibody [CL4254] (ab220031)

Immunohistochemical analysis of formalin-fixed and paraffin-embedded Human duodenum tissue labeling METTL14 with ab220031 at 1/500 dilution showing nuclear immunoreactivity in glandular cells and in the connective tissue.



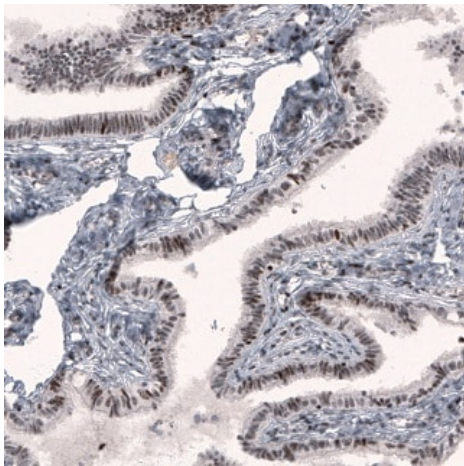
Immunocytochemistry/ Immunofluorescence - Anti-METTL14 antibody [CL4254] (ab220031)

Immunocytochemistry/ Immunofluorescence analysis of RH-30 cells labeling METTL14 with ab220031 at 2-10  $\mu\text{g/mL}$ . Cells were fixed with PFA and permeabilised with Triton X-100. The data is showing specific staining in the nucleoplasm in green. Microtubule- and nuclear probes are visualized in red and blue, respectively (where available).



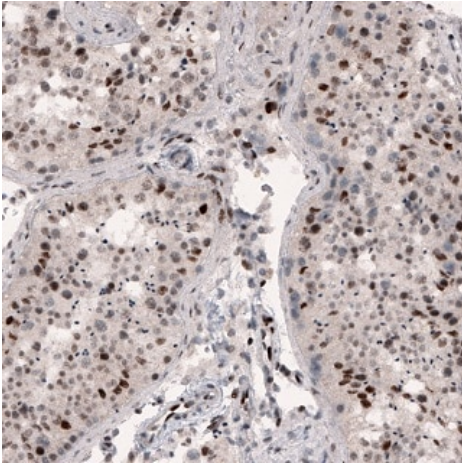
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-METTL14 antibody  
[CL4254] (ab220031)

Immunohistochemical analysis of formalin-fixed and paraffin-embedded Human prostate tissue labeling METTL14 with ab220031 at 1/500 dilution showing nuclear immunoreactivity in glandular cells and in smooth muscle cells.



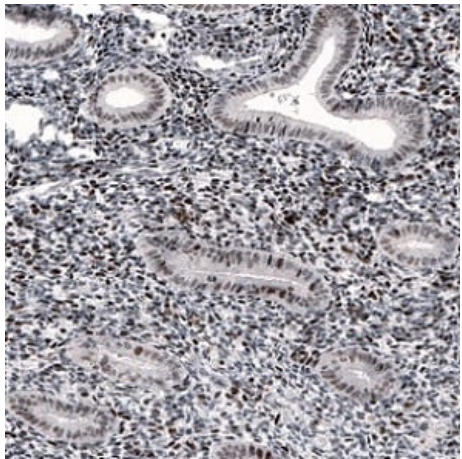
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-METTL14 antibody  
[CL4254] (ab220031)

Immunohistochemical analysis of formalin-fixed and paraffin-embedded Human fallopian tube tissue labeling METTL14 with ab220031 at 1/500 dilution showing nuclear immunoreactivity in glandular cells.



Immunohistochemical analysis of formalin-fixed and paraffin-embedded Human testis tissue labeling METTL14 with ab220031 at 1/500 dilution showing nuclear immunoreactivity in cells in seminiferous tubules.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-METTL14 antibody  
[CL4254] (ab220031)



Immunohistochemical analysis of formalin-fixed and paraffin-embedded Human endometrium tissue labeling METTL14 with ab220031 at 1/500 dilution showing nuclear immunoreactivity in glandular cells and in stroma.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-METTL14 antibody  
[CL4254] (ab220031)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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