abcam

Product datasheet

Anti-METTL14 antibody [CL4252] ab220030

Overview

Product name Anti-METTL14 antibody [CL4252]

Description Mouse monoclonal [CL4252] to METTL14

Host species Mouse

Tested applications Suitable for: ICC/IF, WB, IHC-P

Species reactivity Reacts with: Human

Predicted to work with: Mouse, Chicken, Cow, Orangutan

Immunogen Recombinant fragment (proprietary-tag) corresponding to Human METTL14 aa 1-100.

Database link: **Q9HCE5**

Run BLAST with
Run BLAST with

Positive control Human testis, Human endometrium, Human prostate, Human cervix, Human cerebral cortex and

Human duodenum tissues; A431 cell line lysate. ICC/IF: RH-30 cells.

General notes

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.

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&As

Properties

Form Liquid

Storage instructions 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.

Storage buffer pH: 7.20

Preservative: 0.02% Sodium azide

Constituents: 40% Glycerol (glycerin, glycerine), 59% PBS

Purity Protein A purified

Clonality Monoclonal
Clone number CL4252

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Applications

The Abpromise guarantee

Our <u>Abpromise guarantee</u> covers the use of ab220030 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
ICC/IF		Use a concentration of 2 - 10 µg/ml.
WB		1/500 - 1/1000. Predicted molecular weight: 52 kDa.
IHC-P	★★★ ☆☆ (2)	1/1000 - 1/2500. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

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.

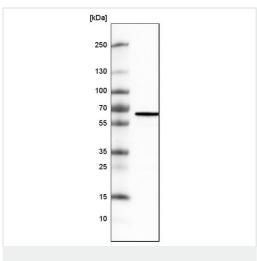
Sequence similarities

Belongs to the MT-A70-like family.

Cellular localization

Nucleus.

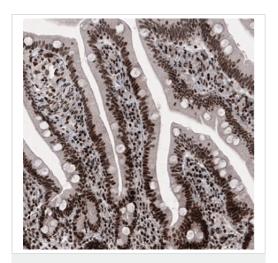
Images



Western blot - Anti-METTL14 antibody [CL4252] (ab220030)

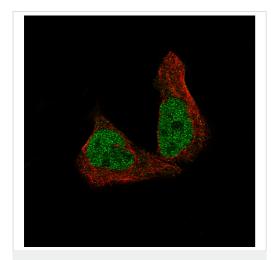
Anti-METTL14 antibody [CL4252] (ab220030) at 1/500 dilution + A431 cell line lysate

Predicted band size: 52 kDa



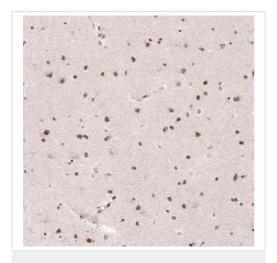
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-METTL14 antibody
[CL4252] (ab220030)

Immunohistochemical analysis of formalin-fixed and paraffinembedded Human duodenum tissue labeling METTL14 with ab220030 at 1/1000 dilution, showing strong nuclear positivity in glandular cells and in the connective tissue.



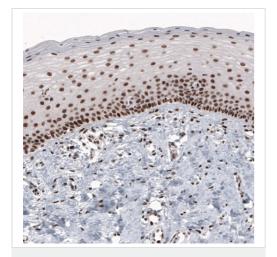
Immunocytochemistry/ Immunofluorescence - Anti-METTL14 antibody [CL4252] (ab220030)

Immunocytochemistry/ Immunofluorescence analysis of RH-30 cells labeling METTL14 with ab220030 at 2-10 µg/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).



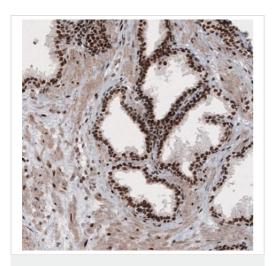
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-METTL14 antibody
[CL4252] (ab220030)

Immunohistochemical analysis of formalin-fixed and paraffinembedded Human cerebral cortex tissue labeling METTL14 with ab220030 at 1/1000 dilution, showing moderate nuclear positivity in neurons.



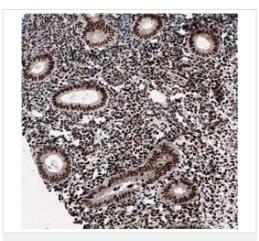
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-METTL14 antibody
[CL4252] (ab220030)

Immunohistochemical analysis of formalin-fixed and paraffinembedded Human cervix tissue labeling METTL14 with ab220030 at 1/1000 dilution, showing strong nuclear positivity in squamous ephitelium and connective tissue cells.



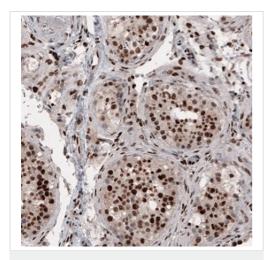
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-METTL14 antibody
[CL4252] (ab220030)

Immunohistochemical analysis of formalin-fixed and paraffinembedded Human prostate tissue labeling METTL14 with ab220030 at 1/1000 dilution, showing strong nuclear positivity in glandular cells and in smooth muscle.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-METTL14 antibody
[CL4252] (ab220030)

Immunohistochemical analysis of formalin-fixed and paraffinembedded Human endometrium tissue labeling METTL14 with ab220030 at 1/1000 dilution, showing strong nuclear immunoreactivity in glandular cells and in stroma.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-METTL14 antibody
[CL4252] (ab220030)

Immunohistochemical analysis of formalin-fixed and paraffinembedded Human testis tissue labeling METTL14 with ab220030 at 1/1000 dilution, showing strong nuclear positivity in cells in seminiferous tubes.

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