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METTL14 Rabbit pAb

Catalog No.: A8530 15 Publications

Basic Information

Observed MW
65KDa

Calculated MW
52kDa

Category
Primary antibody

Applications
WB,IHC,IF/ICC,IP

Cross-Reactivity
Human, Mouse, Rat

Background

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. In the heterodimer formed with METTL3, METTL14 constitutes the RNA-binding scaffold that recognizes the substrate rather than the catalytic core. 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. 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 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.

Recommended Dilutions

WB	1:500 - 1:2000
IHC	1:50 - 1:200
IF/ICC	1:50 - 1:200
IP	1:50 - 1:200

Immunogen Information

Gene ID
57721

Swiss Prot
Q9HCE5

Immunogen
Recombinant fusion protein containing a sequence corresponding to amino acids 1-210 of human METTL14 (NP_066012.1).

Synonyms
METTL14;hMETTL14

Contact

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Product Information

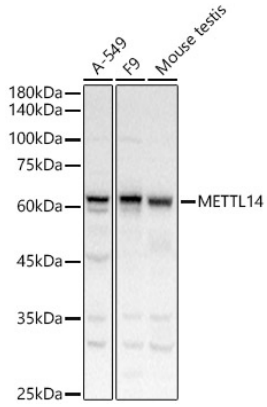
Source
Rabbit

Isotype
IgG

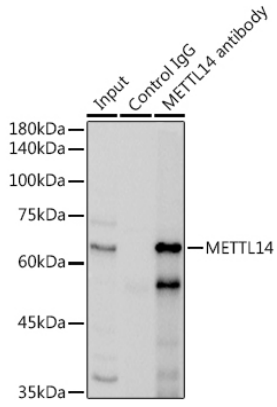
Purification
Affinity purification

Storage
Store at -20℃. Avoid freeze / thaw cycles.
Buffer: PBS with 0.05% proclin300,50% glycerol,pH7.3.

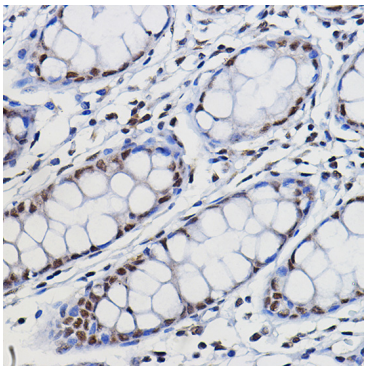
Validation Data



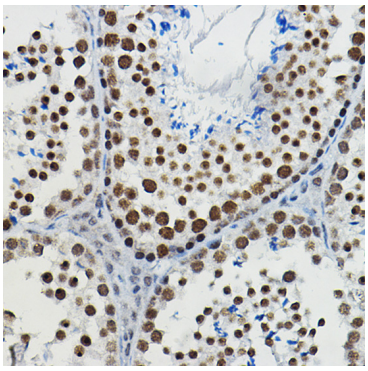
Western blot analysis of extracts of various cell lines, using METTL14 antibody (A8530) at 1:730 dilution.
Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25ug per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 0.5s.



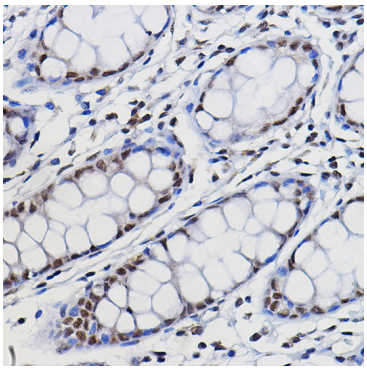
Immunoprecipitation analysis of 300ug extracts of HepG2 cells using 3ug METTL14 antibody (A8530). Western blot was performed from the immunoprecipitate using METTL14 antibody (A8530) at a dilution of 1:1000.



Immunohistochemistry of paraffin-embedded human colon using METTL14 Rabbit pAb (A8530) at dilution of 1:100 (40x lens).Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.

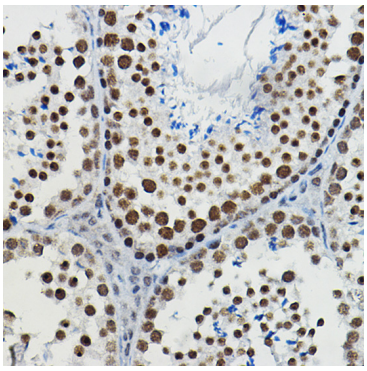


Immunohistochemistry of paraffin-embedded mouse testis using METTL14 Rabbit pAb (A8530) at dilution of 1:100 (40x lens).Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.

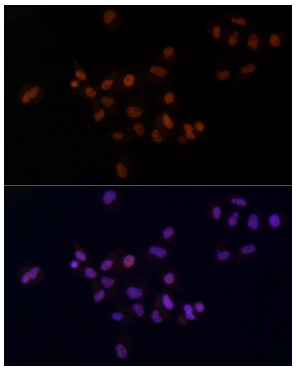


Immunohistochemistry of paraffin-embedded human colon using METTL14 Rabbit pAb (A8530) at dilution of 1:100 (40x lens).Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.

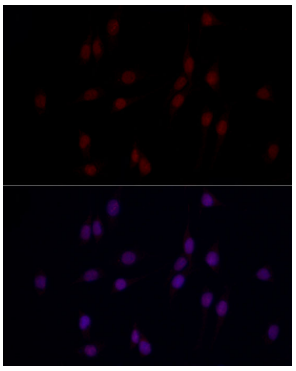
Validation Data



Immunohistochemistry of paraffin-embedded mouse testis using METTL14 Rabbit pAb (A8530) at dilution of 1:100 (40x lens).Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.



Immunofluorescence analysis of A-549 cells using METTL14 Rabbit pAb (A8530) at dilution of 1:25 (40x lens). Blue: DAPI for nuclear staining.



Immunofluorescence analysis of PC-12 cells using METTL14 Rabbit pAb (A8530) at dilution of 1:25 (40x lens). Blue: DAPI for nuclear staining.