# Product datasheet

## Anti-METTL3 antibody [EPR18810] ab195352

**KO VALIDATED**

**Recombinant**

**RabMab**

- **8 Reviews**
- **10 References**
- **14 Images**

### Overview

**Product name**  
Anti-METTL3 antibody [EPR18810]

**Description**  
Rabbit monoclonal [EPR18810] to METTL3

**Host species**  
Rabbit

**Tested applications**  
Suitable for: Flow Cyt, IHC-Fr, WB, IHC-P, ICC/IF, IP

**Species reactivity**  
Reacts with: Mouse, Rat, Human, Pig  
Predicted to work with: Sheep, Goat, Horse, Guinea pig, Cow, Cat, Dog, Non human primates

**Immunogen**  
Recombinant fragment within Human METTL3 aa 1-250. The exact sequence is proprietary.  
Database link: [Q86U44](#)

**Positive control**  
WB: Raji, HeLa, HEK-293, Jurkat, NCCIT, F9, Neuro-2a, LLC1, C6, RAW 264.7, PC-12 and NIH3T3 cell lysates; human thymus lysate, mouse brain, heart and kidney lysates; rat brain lysate.  
IHC-P: Human bladder cancer, mouse testis and rat testis tissues. ICC/IF: HCT116 and HeLa cells.  
IP: HeLa cell lysate.

### General notes

Our RabMab® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to [RabMab® patents](#).

We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support team.

This product is a recombinant rabbit monoclonal antibody.

### Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Form</strong></td>
<td>Liquid</td>
</tr>
<tr>
<td><strong>Storage instructions</strong></td>
<td>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.</td>
</tr>
<tr>
<td><strong>Storage buffer</strong></td>
<td>Preservative: 0.01% Sodium azide</td>
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</tbody>
</table>
Constituents: PBS, 40% Glycerol, 0.05% BSA

Purity
Protein A purified

Clonality
Monoclonal

Clone number
EPR18810

Isotype
IgG

Applications

Our Abpromise guarantee covers the use of ab195352 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
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<tr>
<td>Flow Cyt</td>
<td>Use at an assay dependent concentration. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.</td>
<td></td>
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<tr>
<td>IHC-Fr</td>
<td>![5/5] 1/1000.</td>
<td></td>
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<tr>
<td>WB</td>
<td>![5/5] 1/1000. Detects a band of approximately 64 kDa (predicted molecular weight: 64 kDa). Milk recommended as blocking agent.</td>
<td></td>
</tr>
<tr>
<td>IP</td>
<td>1/50.</td>
<td></td>
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</tbody>
</table>

Target

Function
N6-methyltransferase that methylates adenosine residues of some mRNAs. N6-methyladenosine (m6A), which is present at internal sites of some mRNAs, may play a role in the efficiency of mRNA splicing, transport or translation.

Tissue specificity
Widely expressed at low level. Expressed in spleen, thymus, prostate, testis, ovary, small intestine, colon and peripheral blood leukocytes.

Sequence similarities
Belongs to the MT-A70-like family.

Post-translational modifications
Phosphorylated upon DNA damage, probably by ATM or ATR.

Cellular localization
Nucleus speckle. Colocalizes with speckles in interphase nuclei. Suggesting that it may be associated with nuclear pre-mRNA splicing components.

Images
**Western blot - Anti-METTL3 antibody [EPR18810]**

(ab195352)  
This image is courtesy of an Abreview by Pedro Batista.

All lanes: Anti-METTL3 antibody [EPR18810] (ab195352) at 1/1000 dilution

Lane 1: Mouse embryonic stem cells  
Lane 2: Mouse embryonic stem cells (METTL3 Knock-out)

Lysates/proteins at 15 µg per lane.

Secondary

All lanes: Goat anti-Rabbit Polyclonal at 1/10000 dilution

Performed under reducing conditions.

**Predicted band size:** 64 kDa

**Exposure time:** 5 minutes

Blocking step: 5% Milk for 30 minutes at 25°C.

All lanes: Anti-METTL3 antibody [EPR18810] (ab195352) at 1/5000 dilution

Lane 1: Raji (Human Burkitt's lymphoma cell line) whole cell lysate  
Lane 2: HeLa (Human epithelial cells from cervix adenocarcinoma) whole cell lysate  
Lane 3: HEK-293 (Human epithelial cells from embryonic kidney) whole cell lysate  
Lane 4: Jurkat (Human T cell leukemia cells from peripheral blood) whole cell lysate  
Lane 5: NCCIT (human pluripotent embryonal carcinoma) whole cell lysate  
Lane 6: F9 (Mouse embryo testicular cancer cell line) whole cell lysate  
Lane 7: Neuro-2a (Mouse neuroblastoma cells) whole cell lysate  
Lane 8: LLC1 (Mouse lung carcinoma) whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes: Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at
1/100 000 dilution

**Predicted band size:** 64 kDa

**Observed band size:** 64 kDa

**Exposure time:** 10 seconds

5% NFDM/TBST: Blocking and diluting buffer.

Immunohistochemical analysis of paraffin-embedded rat testis tissue labeling METTL3 using ab195352 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) secondary antibody at 1/500 dilution. Counterstain: Hematoxylin.

Inset image: negative control obtained using PBS instead of ab195352, and secondary antibody only.

Note: Nuclear staining on rat testis was observed.

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HCT116 (Human colorectal carcinoma cell line) cells labeling METTL3 with ab195352 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution (green).

Confocal image showing nuclear staining on HCT116 cell line. The nuclear counter stain is DAPI (blue).

Tubulin is detected with anti-alpha Tubulin mouse mAb (ab7291) at 1/1000 dilution, followed by Goat Anti-Mouse IgG H&L (AlexaFluor®594) (ab150120) secondary antibody at 1/1000 dilution (red).

The negative controls are as follows:
1. ab195352 at 1/1000 dilution, followed by Goat Anti-Mouse IgG H&L (AlexaFluor®594) (ab150120) secondary antibody at 1/1000 dilution.
2. anti-alpha Tubulin mouse mAb (ab7291) at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488)
Flow Cytometry - Anti-METTL3 antibody [EPR18810] (ab195352) staining METTL3 in the human cell line HEK-293 (Human epithelial cell line from embryonic kidney) by flow cytometry. Cells were fixed with 4% paraformaldehyde and the sample was incubated with the primary antibody at a 1/70 dilution, followed by Goat-Anti Rabbit IgG (Alexa Fluor® 488) secondary antibody at a 1/2000 dilution.

Isoytype control: Rabbit monoclonal IgG (Black)

Unlabelled control: Cell without incubation with primary antibody and secondary antibody (Blue)

Western blot - Anti-METTL3 antibody [EPR18810] (ab195352) at 1/1000 dilution

Lane 1: mouse brain lysate
Lane 2: mouse heart lysate
Lane 3: mouse kidney lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes: Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/100000 dilution

Predicted band size: 64 kDa
Observed band size: 64 kDa

Exposure time: 30 seconds

5% NFDM/TBST: Blocking and diluting buffer.
Immunohistochemical analysis of paraffin-embedded human bladder cancer tissue labeling METTL3 using ab195352 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) secondary antibody at 1/500 dilution. Counterstain: Hematoxylin.
Inset image: negative control obtained using PBS instead of ab195352, and secondary antibody only.
Note: Nuclear staining on human bladder cancer was observed.

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HeLa (Human epithelial cells from cervix adenocarcinoma) cells labeling METTL3 with ab195352 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution (green). Confocal image showing nuclear staining on HeLa cell line. The nuclear counter stain is DAPI (blue).

Tubulin is detected with Anti-alpha Tubulin mouse MAb (ab7291) at 1/1000 dilution and Goat Anti-Mouse IgG H&L (Alexa Fluor® 594) (ab150120) secondary antibody at 1/1000 dilution (red). The negative controls are as follows:
1. ab195352 at 1/1000 dilution, followed by Goat Anti-Mouse IgG H&L (Alexa Fluor® 594) (ab150120) secondary antibody at 1/1000 dilution.
2. Anti-alpha Tubulin mouse MAb (ab7291) at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution.
**Western blot - Anti-METTL3 antibody [EPR18810] (ab195352)**

- **Lane 1**: C6 (Rat glial tumor cells) whole cell lysate
- **Lane 2**: RAW 264.7 (Mouse macrophage cells transformed with Abelson murine leukemia virus) whole cell lysate
- **Lane 3**: PC-12 (Rat adrenal gland pheochromocytoma) whole cell lysate
- **Lane 4**: NIH/3T3 (Mouse embryo fibroblast cells) whole cell lysate

Lysates/proteins at 10 µg per lane.

**Secondary**

- **All lanes**: Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/100000 dilution

**Predicted band size**: 64 kDa
**Observed band size**: 64 kDa

**Exposure time**: 2 seconds

5% NFDM/TBST: Blocking and diluting buffer.

Immunohistochemical analysis of paraffin-embedded mouse testis tissue labeling METTL3 using ab195352 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) secondary antibody at 1/500 dilution. Counterstain: Hematoxylin.

Inset image: negative control obtained using PBS instead of ab195352, and secondary antibody only.

Note: Nuclear staining on mouse testis was observed.
Western blot - Anti-METTL3 antibody [EPR18810] (ab195352)

Anti-METTL3 antibody [EPR18810] (ab195352) at 1/5000 dilution
+ Human thymus lysate at 10 µg

Secondary
Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/10000 dilution

Predicted band size: 64 kDa
Observed band size: 64 kDa

Exposure time: 3 minutes

5% NFDM/TBST: Blocking and diluting buffer.

Western blot - Anti-METTL3 antibody [EPR18810] (ab195352)

Anti-METTL3 antibody [EPR18810] (ab195352) at 1/1000 dilution
+ rat brain lysate at 10 µg

Secondary
Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/100000 dilution

Predicted band size: 64 kDa
Observed band size: 64 kDa

Exposure time: 20 seconds

5% NFDM/TBST: Blocking and diluting buffer.
METTL3 was immunoprecipitated from 1mg of HeLa (Human epithelial cells from cervix adenocarcinoma) whole cell lysate with ab195352 at 1/50 dilution. Western blot was performed from the immunoprecipitate using ab195352 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/10000 dilution.

Lane 1: Input: 10µg of HeLa whole cell lysate.
Lane 2: HeLa whole cell lysate following IP with ab195352.
Lane 3: Negative control: IP using Rabbit monoclonal IgG (ab172730) instead of ab195352 in HeLa whole cell lysates.
Blocking and dilution buffer and concentration: 5% NFDM/TBST. 1 second exposure.

Immunohistochemical analysis of adult mouse frozen testis sections labelling METTL3 with ab195352 at dilution of 1/1000. The secondary antibody used was ab150081 at a dilution of 1/500. The section was fixed with Paraformaldehyde and permeabilised with 0.1% Triton X-100 in PBS. The sample was counterstained with Phalloidin (red) which labels F-actin.

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

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