

# Anti-Dnmt3a antibody ab226261

[1 References](#) [2 Images](#)

### Overview

<b>Product name</b>	Anti-Dnmt3a antibody
<b>Description</b>	Rabbit polyclonal to Dnmt3a
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Human
<b>Immunogen</b>	Synthetic peptide within Human Dnmt3a aa 125-175. The exact sequence is proprietary. NP_783328.1 Database link: <a href="#">Q9Y6K1</a>
<b>Positive control</b>	WB: HeLa, HEK-293T, Jurkat, TCMK-1 and NIH/3T3 whole cell lysates. IHC-P: Human ovarian carcinoma tissue.
<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 Preservative: 0.09% Sodium azide Constituent: Tris citrate/phosphate
<b>Purity</b>	pH 7 to 8 Immunogen affinity purified
<b>Purification notes</b>	ab226261 was affinity purified using an epitope specific to Dnmt3a immobilized on solid support.
<b>Clonality</b>	Polyclonal

Isotype

IgG

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab226261 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
WB		1/2000 - 1/10000. Predicted molecular weight: 102 kDa.
IHC-P		1/500 - 1/2000. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

## Target

### Function

Required for genome wide de novo methylation and is essential for the establishment of DNA methylation patterns during development. DNA methylation is coordinated with methylation of histones. It modifies DNA in a non-processive manner and also methylates non-CpG sites. May preferentially methylate DNA linker between 2 nucleosomal cores and is inhibited by histone H1. Plays a role in paternal and maternal imprinting. Required for methylation of most imprinted loci in germ cells. Acts as a transcriptional corepressor for ZNF238. Can actively repress transcription through the recruitment of HDAC activity.

### Tissue specificity

Highly expressed in fetal tissues, skeletal muscle, heart, peripheral blood mononuclear cells, kidney, and at lower levels in placenta, brain, liver, colon, spleen, small intestine and lung.

### Sequence similarities

Belongs to the C5-methyltransferase family.  
Contains 1 ADD domain.  
Contains 1 GATA-type zinc finger.  
Contains 1 PHD-type zinc finger.  
Contains 1 PWWP domain.

### Domain

The PWWP domain is essential for targeting to pericentric heterochromatin.

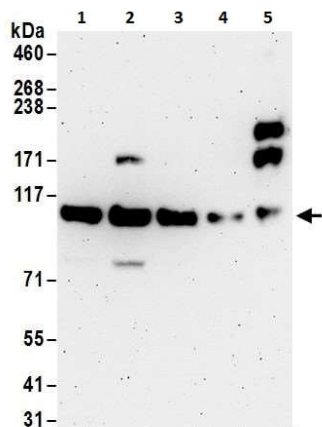
### Post-translational modifications

Sumoylated; sumoylation disrupts the ability to interact with histone deacetylases (HDAC1 and HDAC2) and repress transcription.

### Cellular localization

Nucleus. Cytoplasm. Accumulates in the major satellite repeats at pericentric heterochromatin.

## Images



Western blot - Anti-Dnmt3a antibody (ab226261)

**All lanes :** Anti-Dnmt3a antibody (ab226261) at 0.1 µg/ml

**Lane 1 :** HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell lysate

**Lane 2 :** HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate

**Lane 3 :** Jurkat (human T cell leukemia cell line from peripheral blood) whole cell lysate

**Lane 4 :** TCMK-1 (mouse kidney epithelial cell line) whole cell lysate

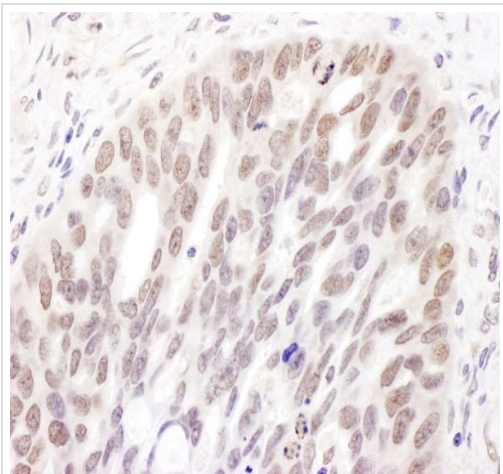
**Lane 5 :** NIH/3T3 (mouse embryo fibroblast cell line) whole cell lysate

Lysates/proteins at 50 µg per lane.

Developed using the ECL technique.

**Predicted band size:** 102 kDa

**Exposure time:** 3 minutes



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Dnmt3a antibody (ab226261)

Formalin-fixed, paraffin-embedded human ovarian carcinoma tissue stained for Dnmt3a using ab226261 at 1/1000 dilution in immunohistochemical analysis.

Detection: DAB staining. Counterstain: Hematoxylin (blue).

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

#### Our Abpromise to you: Quality guaranteed and expert technical support

---

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

#### Terms and conditions

---

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors