



### Anti-Dnmt3a antibody ab2850

★★★★★ [11 Abreviews](#) [114 References](#) [3 Images](#)

#### Overview

<b>Product name</b>	Anti-Dnmt3a antibody
<b>Description</b>	Rabbit polyclonal to Dnmt3a
<b>Host species</b>	Rabbit
<b>Specificity</b>	This antibody detects DNA methyltransferase 3a (Dnmt3a) from human and mouse tissues and cells as well as recombinant human Dnmt3a. This antibody does not detect full length recombinant human Dnmt3b or Dnmt1.
<b>Tested applications</b>	<b>Suitable for:</b> WB
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Human
<b>Immunogen</b>	Synthetic peptide corresponding to Human Dnmt3a aa 50-150. <a href="#">Run BLAST with </a> <a href="#">Run BLAST with </a>
<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 or -80°C. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	Preservative: 0.05% Sodium azide Constituents: 0.1% BSA, 99% PBS
<b>Purity</b>	Immunogen affinity purified
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

#### Applications

## The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab2850 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	★★★★★ (4)	Use a concentration of 2 µg/ml. Detects a band of approximately 120 kDa (predicted molecular weight: 101.5 kDa).

## 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

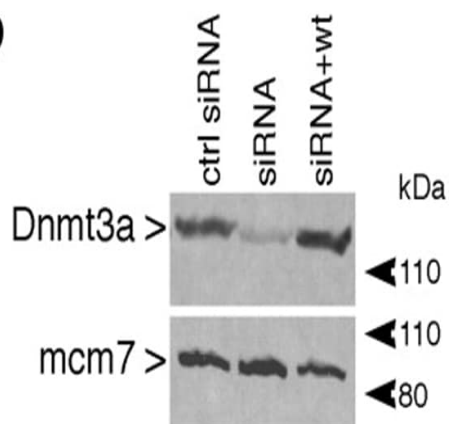
Sumoylated; sumoylation disrupts the ability to interact with histone deacetylases (HDAC1 and HDAC2) and repress transcription.

### Cellular localization

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

## Images

**D**



Western blot - Anti-Dnmt3a antibody (ab2850)

Image from Nucleic Acids Res. 2014 Jan; 42(2): 804–821. Fig 5D, doi: 10.1093/nar/gkt920 Reproduced under the creative commons licence.  
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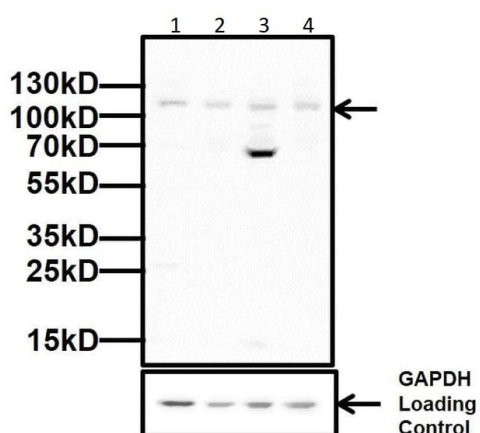
Western blot analysis of DNMT3a in HeLa silenced cells. Total cell extracts were prepared 48 h after electroporation and analyzed by immunoblot with ab2850.

**Fig.1**



Western blot - Anti-Dnmt3a antibody (ab2850)

Western blot of Dnmt3a on P19 cell nuclear extract using ab2850.



Western blot - Anti-Dnmt3a antibody (ab2850)

**All lanes** : Anti-Dnmt3a antibody (ab2850) at 1/500 dilution

**Lane 1** : HeLa cell lysate

**Lane 2** : HepG2 cell lysate

**Lane 3** : HEK293 cell lysate

**Lane 4** : A549 cell lysate

Lysates/proteins at 20 µg per lane.

**Secondary**

**All lanes** : Goat anti-Rabbit IgG (H+L), Superclonal™ HRP at 1/1000 dilution

**Predicted band size:** 101.5 kDa

**Observed band size:** 120 kDa

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

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- 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
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