

**Anti-Dnmt3a Rabbit Monoclonal Antibody**  
Catalog # ABO13831

**Specification**

**Anti-Dnmt3a Rabbit Monoclonal Antibody - Product Information**

Application	WB, IHC, IF, ICC, FC
Primary Accession	<a href="#">Q9Y6K1</a>
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid

**Description**

Anti-Dnmt3a Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.

**Anti-Dnmt3a Rabbit Monoclonal Antibody - Additional Information**

**Gene ID** 1788

**Other Names**

DNA (cytosine-5)-methyltransferase 3A, Dnmt3a, 2.1.1.37, Cysteine methyltransferase DNMT3A, 2.1.1.-, DNA methyltransferase HsallIA, DNA MTase HsallIA, M.HsallIA, DNMT3A

**Calculated MW**

101858 MW KDa

**Application Details**

WB 1:500-1:2000<br>IHC 1:1000-1:2000<br>ICC/IF 1:100-1:500<br>FC 1:50

**Subcellular Localization**

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

**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..

**Contents**

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

**Immunogen**

A synthesized peptide derived from human Dnmt3a

**Purification**

Affinity-chromatography

**Storage**

**Store at -20°C for one year. For short term storage and frequent use, store at 4°C for**

up to one month. Avoid repeated  
freeze-thaw cycles.

## Anti-Dnmt3a Rabbit Monoclonal Antibody - Protein Information

**Name** DNMT3A

### Function

Required for genome-wide de novo methylation and is essential for the establishment of DNA methylation patterns during development (PubMed:<a href="http://www.uniprot.org/citations/12138111" target="\_blank">12138111</a>, PubMed:<a href="http://www.uniprot.org/citations/16357870" target="\_blank">16357870</a>, PubMed:<a href="http://www.uniprot.org/citations/30478443" target="\_blank">30478443</a>). DNA methylation is coordinated with methylation of histones (PubMed:<a href="http://www.uniprot.org/citations/12138111" target="\_blank">12138111</a>, PubMed:<a href="http://www.uniprot.org/citations/16357870" target="\_blank">16357870</a>, PubMed:<a href="http://www.uniprot.org/citations/30478443" target="\_blank">30478443</a>). It modifies DNA in a non-processive manner and also methylates non-CpG sites (PubMed:<a href="http://www.uniprot.org/citations/12138111" target="\_blank">12138111</a>, PubMed:<a href="http://www.uniprot.org/citations/16357870" target="\_blank">16357870</a>, PubMed:<a href="http://www.uniprot.org/citations/30478443" target="\_blank">30478443</a>). May preferentially methylate DNA linker between 2 nucleosomal cores and is inhibited by histone H1 (By similarity). Plays a role in paternal and maternal imprinting (By similarity). Required for methylation of most imprinted loci in germ cells (By similarity). Acts as a transcriptional corepressor for ZBTB18 (By similarity). Recruited to trimethylated 'Lys-36' of histone H3 (H3K36me3) sites (By similarity). Can actively repress transcription through the recruitment of HDAC activity (By similarity). Also has weak auto-methylation activity on Cys-710 in absence of DNA (By similarity).

### Cellular Location

Nucleus. Chromosome Cytoplasm. Note=Accumulates in the major satellite repeats at pericentric heterochromatin {ECO:0000250|UniProtKB:O88508}

### Tissue Location

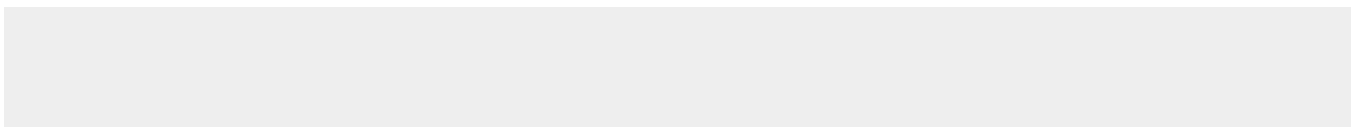
Highly expressed in fetal tissues, skeletal muscle, heart, peripheral blood mononuclear cells, kidney, and at lower levels in placenta, brain, liver, colon, spleen, small intestine and lung

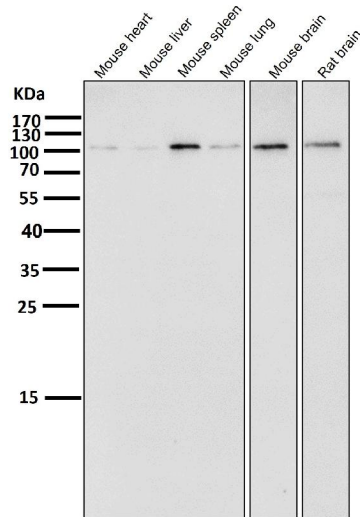
## Anti-Dnmt3a Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

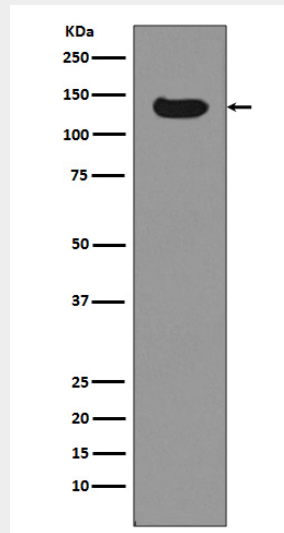
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## Anti-Dnmt3a Rabbit Monoclonal Antibody - Images





All lanes use the Antibody at 1:1W dilution for 1 hour at room temperature.



Western blot analysis of Dnmt3a expression in HeLa cell lysate.