

# Mouse Dnmt3b Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP21512c

## Product Information

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<b>Application</b>	WB, E
<b>Primary Accession</b>	<a href="#">O88509</a>
<b>Reactivity</b>	Mouse
<b>Host</b>	Rabbit
<b>Clonality</b>	polyclonal
<b>Isotype</b>	Rabbit IgG
<b>Clone Names</b>	RB50993
<b>Calculated MW</b>	97228

## Additional Information

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<b>Gene ID</b>	13436
<b>Other Names</b>	DNA (cytosine-5)-methyltransferase 3B, Dnmt3b, DNA methyltransferase MmuIIIB, DNA MTase MmuIIIB, MMmuIIIB, Dnmt3b
<b>Target/Specificity</b>	This Mouse Dnmt3b antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 356-390 amino acids from the Central region of Mouse Dnmt3b.
<b>Dilution</b>	WB~~1:2000 E~~Use at an assay dependent concentration.
<b>Format</b>	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
<b>Storage</b>	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
<b>Precautions</b>	Mouse Dnmt3b Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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<b>Name</b>	Dnmt3b
<b>Function</b>	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. May preferentially methylates nucleosomal DNA within the nucleosome core region. May function as transcriptional co-repressor by associating with CBX4 and

independently of DNA methylation. Seems to be involved in gene silencing. In association with DNMT1 and via the recruitment of CTCFL/BORIS, involved in activation of BAG1 gene expression by modulating dimethylation of promoter histone H3 at H3K4 and H3K9. Functions as a transcriptional corepressor by associating with ZHX1 (By similarity). Required for DUX4 silencing in somatic cells (By similarity).

#### Cellular Location

Nucleus. Note=Accumulates in the major satellite repeats at pericentric heterochromatin

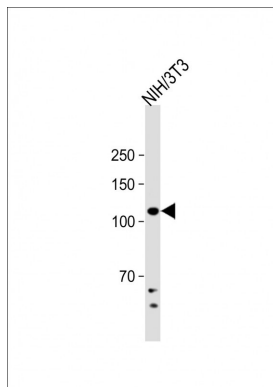
## Background

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. May preferentially methylates nucleosomal DNA within the nucleosome core region. May function as transcriptional co- repressor by associating with CBX4 and independently of DNA methylation. Seems to be involved in gene silencing. In association with DNMT1 and via the recruitment of CTCFL/BORIS, involved in activation of BAG1 gene expression by modulating dimethylation of promoter histone H3 at H3K4 and H3K9. Function as transcriptional corepressor by associating with ZHX1 (By similarity).

## References

Okano M.,et al.Nat. Genet. 19:219-220(1998).  
Yin B.,et al.Zhongguo Yi Xue Ke Xue Yuan Xue Bao 21:431-438(1999).  
Okano M.,et al.Cell 99:247-257(1999).  
Gowher H.,et al.J. Biol. Chem. 277:20409-20414(2002).  
Christophorou M.A.,et al.Nature 507:104-108(2014).

## Images



All lanes : Anti-Mouse Dnmt3b Antibody (Center)at 1:500 dilution + NIH-3T3 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size : 110kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.