10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Mouse Dnmt3b Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21512c

Product Information

Application	WB, E
Primary Accession	O88509
Reactivity	Mouse
Predicted	Rat, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB50993
Calculated MW	97228

Additional Information

Gene ID	13436
Other Names	DNA (cytosine-5)-methyltransferase 3B, Dnmt3b, DNA methyltransferase MmuIIIB, DNA MTase MmuIIIB, MMmuIIIB, Dnmt3b
Target/Specificity	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.
Dilution	WB~~1:2000 E~~Use at an assay dependent concentration.
Format	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.
Storage	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.
Precautions	Mouse Dnmt3b Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	Dnmt3b
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. 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

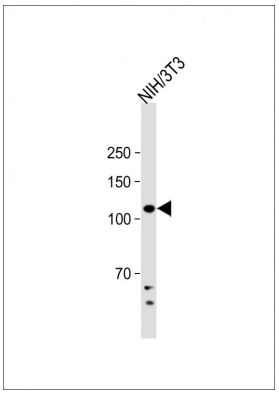
Background

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

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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'.