Nature Biosciences

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Dnmt3L Rabbit mAb [6509]

Cat NO. :A63680

Information:

Applications	Reactivity:	UniProt ID:	MW(kDa)	Host	Isotype	Size
WB,IHC,ICC/IF	H,M	Q9UJW3	44 kDa	Rabbit	IgG	100ul,200ul

Applications detail:

Application	Dilution
WB	1:1000-2000
IHC	1:100
ICC/IF	1:100
The optimal dilutions should be determined by the end user	

Conjugate:

UnConjugate

Form:

Liquid

sensitivity:

Endogenous

Purification:

Protein A purification

Specificity:

Antibody is produced by immunizing animals with a synthetic peptide at the sequence of human Dnmt3L

Storage buffer and conditions:

Antibody store in 10 mM PBS, 0.5mg/ml BSA, 50% glycerol（buffer）.

Shipped at 4°C. Store at-20°C or -80°C.

Products are valid for one natural year of receipt.Avoid repeated freeze / thaw cycles.

Tissue specificity:

Expressed at low levels in several tissues including testis, ovary, and thymus..

Subcellular location:

Nucleus.

Function:

Catalytically inactive regulatory factor of DNA methyltransferases that can either promote or inhibit DNA methylation depending on the context (By similarity). Essential for the function of DNMT3A and DNMT3B: activates DNMT3A and DNMT3B by binding to their catalytic domain (PubMed:17687327). Acts by accelerating the binding of DNA and S-adenosyl-L-methionine (AdoMet) to the methyltransferases and dissociates from the complex after DNA binding to the methyltransferases (PubMed:17687327). Recognizes unmethylated histone H3 lysine 4 (H3K4me0) and induces de novo DNA methylation by recruitment or activation of DNMT3 (PubMed:17687327). Plays a key role in embryonic stem cells and germ cells (By similarity). In germ cells,

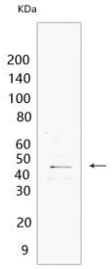
Introduction: **WB:** Western Blot **IP:** Immunoprecipitation **IHC:** Immunohistochemistry **ChIP:** Chromatin Immunoprecipitation **ICC/IF:** Immunocytochemistry/ Immunofluorescence **F:** Flow Cytometry

Cross Reactivity: **H:** human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm** D. melanogaster **X:** Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Hr:** horse

required for the methylation of imprinted loci together with DNMT3A (By similarity). In male germ cells, specifically required to methylate retrotransposons, preventing their mobilization (By similarity). Plays a key role in embryonic stem cells (ESCs) by acting both as an positive and negative regulator of DNA methylation (By similarity). While it promotes DNA methylation of housekeeping genes together with DNMT3A and DNMT3B, it also acts as an inhibitor of DNA methylation at the promoter of bivalent genes (By similarity). Interacts with the EZH2 component of the PRC2/EED-EZH2 complex, preventing interaction of DNMT3A and DNMT3B with the PRC2/EED-EZH2 complex, leading to maintain low methylation levels at the promoters of bivalent genes (By similarity). Promotes differentiation of ESCs into primordial germ cells by inhibiting DNA methylation at the promoter of RHOX5, thereby activating its expression (By similarity)..

Validation Data：

Dnmt3L Rabbit mAb [6509] Images



Western blot（SDS PAGE） analysis of extracts from mESC cells.Using Dnmt3LRabbit mAb [6509] at dilution of 1:1000 incubated at 4℃ over night.

View more information on http://naturebios.com

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 1% w/v Milk, 1X TBST at 4°C overnight.