

Datasheet for ABIN6261345

anti-DNMT3L antibody (Internal Region)[Go to Product page](#)**4** Images

Overview

Quantity:	100 µL
Target:	DNMT3L (TRDMT1)
Binding Specificity:	Internal Region
Reactivity:	Human, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This DNMT3L antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC), Immunofluorescence (IF), Immunoprecipitation (IP), Chromatin Immunoprecipitation (ChIP), Immunocytochemistry (ICC)

Product Details

Immunogen:	A synthesized peptide derived from human DNMT3L, corresponding to a region within the internal amino acids.
Isotype:	IgG
Specificity:	DNMT3L Antibody detects endogenous levels of total DNMT3L.
Predicted Reactivity:	Pig,Dog
Purification:	The antiserum was purified by peptide affinity chromatography using SulfoLink™ Coupling Resin (Thermo Fisher Scientific).

Target Details

Target:	DNMT3L (TRDMT1)
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Target Details

Alternative Name: DNMT3L ([TRDMT1 Products](#))

Background: Description: 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, 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).

Gene: DNMT3L

Molecular Weight: 44kDa

Gene ID: 29947

UniProt: [Q9UJW3](#)

Application Details

Application Notes: WB 1:500-1:2000, IHC 1:50-1:200, IF/ICC 1:20-1:50, IP 1:20-1:50, CHIP 1:20-1:50, ELISA(peptide) 1:20000-1:40000

Restrictions: For Research Use only

Handling

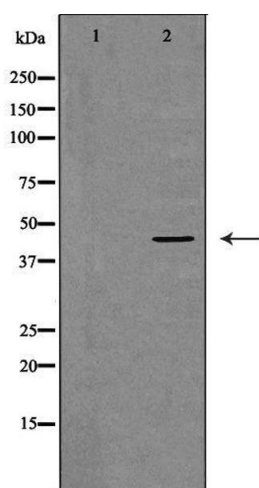
Format: Liquid

Concentration: 1 mg/mL

Handling

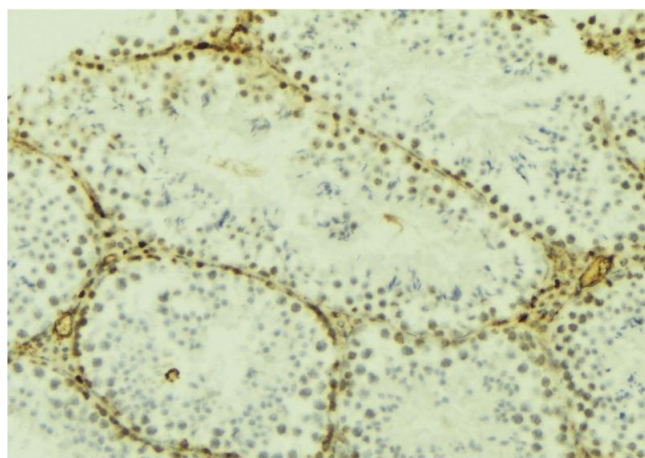
Buffer:	Rabbit IgG in phosphate buffered saline , pH 7.4, 150 mM NaCl, 0.02 % sodium azide and 50 % glycerol.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Store at -20 °C. Stable for 12 months from date of receipt.
Expiry Date:	12 months

Images



Western Blotting

Image 1. Western blot analysis of Hela whole cell lysates, using DNMT3L Antibody. The lane on the left is treated with the antigen-specific peptide.



Immunohistochemistry

Image 2. ABIN6277187 at 1/100 staining Mouse testis tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22°C. An HRP conjugated goat anti-rabbit antibody was used as the secondary



Immunofluorescence (fixed cells)

Image 3. ABIN6277187 staining HeLa by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25°C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37°C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab, diluted at 1/600, was used as the secondary antibody.

Please check the [product details page](#) for more images. Overall 4 images are available for ABIN6261345.