

Datasheet for ABIN6657590
anti-DNMT3A antibody (C-Term)



[Go to Product page](#)

2 Images

Overview

Quantity:	100 µg
Target:	DNMT3A
Binding Specificity:	C-Term
Reactivity:	Mouse
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This DNMT3A antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunofluorescence (IF), Flow Cytometry (FACS), Chromatin Immunoprecipitation (ChIP), Fluorescence Microscopy (FM), Multiplex Assay (MA)

Product Details

Purpose:	Dnmt3a Antibody
Immunogen:	Dnmt3a Antibody was produced in mice prepared by repeated immunizations with bacteria expressed near the C-terminus recombinant mouse Dnmt3a protein.
Clone:	64B1446
Isotype:	IgG1 kappa
Cross-Reactivity (Details):	A BLAST analysis was used to suggest cross-reactivity with Dnmt3a from human and mouse based on 100 % homology with the immunizing sequence.
Purification:	Anti-Dnmt3a Antibody was purified by Protein G chromatography.

Target Details

Target:	DNMT3A
Alternative Name:	Dnmt3a (DNMT3A Products)
Background:	<p>Synonyms: DNA (cytosine-5)-methyltransferase 3A, Dnmt3a, 2.1.1.37, DNA methyltransferase HsaIIIA, DNA MTase HsaIIIA, M.HsaIIIA</p> <p>Background: Anti-Dnmt3a Antibody detects mouse Dnmt3a. Methylation of DNA at cytosine residues plays an important role in regulation of gene expression, genomic imprinting and is essential for mammalian development. Hypermethylation of CpG islands in tumor suppressor genes or hypomethylation of bulk genomic DNA may be linked with development of cancer. To date, 3 families of mammalian DNA methyltransferase genes have been identified which include Dnmt1, Dnmt2 and Dnmt3. Dnmt1 is constitutively expressed in proliferating cells and inactivation of this gene causes global demethylation of genomic DNA and embryonic lethality. Dnmt2 is expressed at low levels in adult tissues and its inactivation does not affect DNA methylation or maintenance of methylation. The Dnmt3 family members, Dnmt3a and Dnmt3b, are strongly expressed in ES cells but their expression is down regulated in differentiating ES cells and is low in adult somatic tissue. Recently, it has been shown that naturally occurring mutations of Dnmt3b gene occurs in patients with a rare autosomal recessive disorder, termed ICF (immunodeficiency, centromeric instability, and facial anomalies) syndrome. Anti-Dnmt3a Antibody is ideal for investigators involved in cancer, epigenetics, and cell cycle protein research.</p> <p>Gene Name: Dnmt3a</p>
Gene ID:	13435
NCBI Accession:	NP_031898
UniProt:	O88508

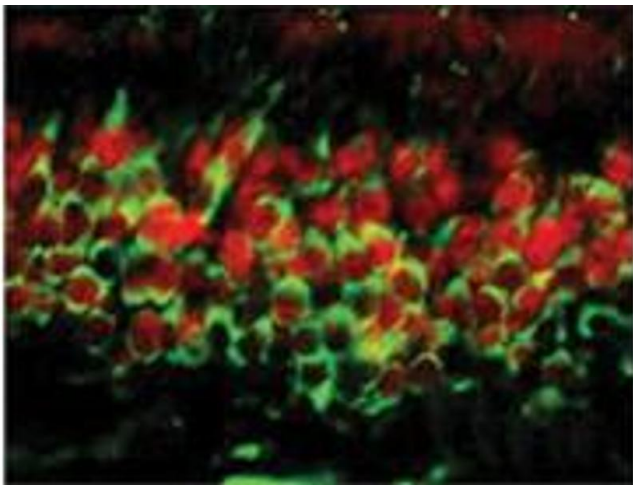
Application Details

Application Notes:	IF_Microscopy_Dilution: 5 µg/mL Western_Blot_Dilution: 2 µg/mL
Comment:	Anti-Dnmt3a Antibody is tested for use in WB, ChIP, Flow, ICC/IF, IHC, IHC-Fr, and IHC-P. Expect a band approximately 120 kDa on specific lysates. Specific conditions for reactivity should be optimized by the end user.
Restrictions:	For Research Use only

Handling

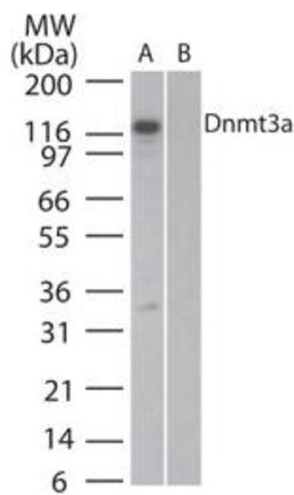
Format:	Liquid
Buffer:	Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 Stabilizer: 0.05 % BSA Preservative: 0.05 % (w/v) Sodium Azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C, -20 °C
Storage Comment:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiry Date:	12 months

Images



Immunofluorescence

Image	1.	Dnmt3a	Immunofluorescence.
			Immunofluorescence Microscopy of Mouse Anti-Dnmt3a antibody. Tissue: olfactory epithelium. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: Dnmt3a antibody at 10 µg/mL for 1 h at RT. Secondary antibody: Fluorescein mouse secondary antibody at 1:10,000 for 45 min at RT. Localization: Dnmt3a is expressed in the nuclei of post-mitotic neurons. Staining: Dnmt3a is co-expressed as a red signal with a green neuron-specific tubulin counterstain.



Western Blotting

Image 2. Dnmt3a Western Blot. Western Blot of Mouse Anti-Dnmt3a antibody. Lane A: Dnmt3a transfected 293 cell lysate. Lane B: Dnmt3a untransfected 293 cell lysate. Load: 30 µg per lane. Primary antibody: Dnmt3a antibody at 1 µg/mL for overnight at 4°C. Secondary antibody: mouse secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 89.6 kDa for Dnmt3a. Other band(s): none.