

Anti-DNMT3A Antibody
Rabbit polyclonal antibody to DNMT3A
Catalog # AP60159

Specification

Anti-DNMT3A Antibody - Product Information

Application	WB
Primary Accession	O9Y6K1
Other Accession	O88508
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	101858

Anti-DNMT3A Antibody - Additional Information

Gene ID 1788

Other Names

DNA (cytosine-5)-methyltransferase 3A; Dnmt3a; DNA methyltransferase HsallIA; DNA MTase HsallIA; M.HsallIA

Target/Specificity

Recognizes endogenous levels of DNMT3A protein.

Dilution

WB~~WB (1/500 - 1/1000)

Format

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage

Store at -20 °C. Stable for 12 months from date of receipt

Anti-DNMT3A Antibody - Protein Information

Name DNMT3A

Function

Required for genome-wide de novo methylation and is essential for the establishment of DNA methylation patterns during development (PubMed:12138111, PubMed:16357870, PubMed:30478443). DNA methylation is coordinated with methylation of histones (PubMed:12138111, PubMed:16357870, PubMed:30478443). It modifies DNA in a non-processive manner and also methylates non-CpG sites (PubMed:12138111, PubMed:16357870, PubMed:30478443). May preferentially methylate DNA linker between 2 nucleosomal cores and is inhibited by histone H1 (By similarity). Plays a role in paternal and maternal imprinting (By similarity). Required for methylation of most imprinted loci in germ cells (By similarity). Acts as a transcriptional corepressor for ZBTB18 (By similarity). Recruited to trimethylated 'Lys-36' of histone H3 (H3K36me3) sites (By similarity). Can actively repress transcription through the recruitment of HDAC activity (By similarity). Also has weak auto-methylation activity on Cys-710 in absence of DNA (By similarity).

Cellular Location

Nucleus. Chromosome Cytoplasm. Note=Accumulates in the major satellite repeats at pericentric heterochromatin {ECO:0000250|UniProtKB:O88508}

Tissue Location

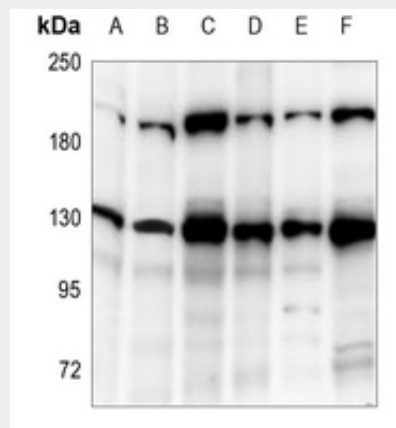
Highly expressed in fetal tissues, skeletal muscle, heart, peripheral blood mononuclear cells, kidney, and at lower levels in placenta, brain, liver, colon, spleen, small intestine and lung

Anti-DNMT3A Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)

Anti-DNMT3A Antibody - Images



Western blot analysis of DNMT3A expression in MEF (A), H9C2 (B), HCT116 (C), Jurkat (D), PC3 (E), HEK293T (F) whole cell lysates.

Anti-DNMT3A Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the N-term region of human DNMT3A. The exact sequence is proprietary.