

Anti-Dnmt3a Rabbit Monoclonal Antibody
Catalog # ABO13831

Specification

Anti-Dnmt3a Rabbit Monoclonal Antibody - Product Information

Application	WB, IHC, IF, ICC, FC
Primary Accession	Q9Y6K1
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid

Description

Anti-Dnmt3a Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.

Anti-Dnmt3a Rabbit Monoclonal Antibody - Additional Information

Gene ID 1788

Other Names

DNA (cytosine-5)-methyltransferase 3A, Dnmt3a, 2.1.1.37, Cysteine methyltransferase DNMT3A, 2.1.1.-, DNA methyltransferase HsallIA, DNA MTase HsallIA, M.HsallIA, DNMT3A

Calculated MW

101858 MW KDa

Application Details

WB 1:500-1:2000
IHC 1:1000-1:2000
ICC/IF 1:100-1:500
FC 1:50

Subcellular Localization

Nucleus. Cytoplasm. Accumulates in the major satellite repeats at pericentric heterochromatin..

Tissue Specificity

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..

Contents

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen

A synthesized peptide derived from human Dnmt3a

Purification

Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for

up to one month. Avoid repeated
freeze-thaw cycles.

Anti-Dnmt3a Rabbit Monoclonal 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

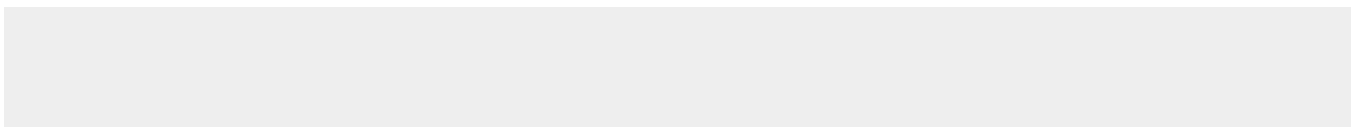
Highly expressed in fetal tissues, skeletal muscle, heart, peripheral blood mononuclear cells, kidney, and at lower levels in placenta, brain, liver, colon, spleen, small intestine and lung

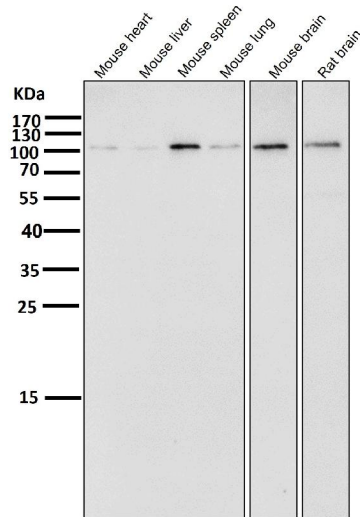
Anti-Dnmt3a Rabbit Monoclonal Antibody - Protocols

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

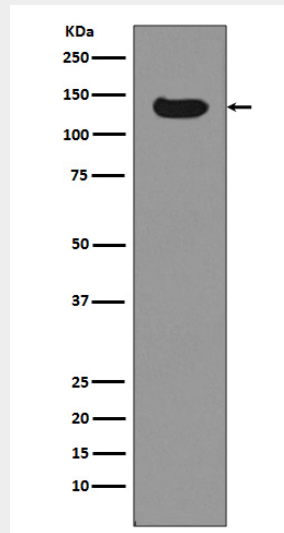
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-Dnmt3a Rabbit Monoclonal Antibody - Images





All lanes use the Antibody at 1:1W dilution for 1 hour at room temperature.



Western blot analysis of Dnmt3a expression in HeLa cell lysate.