

Anti-Dnmt3a Rabbit Monoclonal Antibody

Catalog # ABO13831

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.

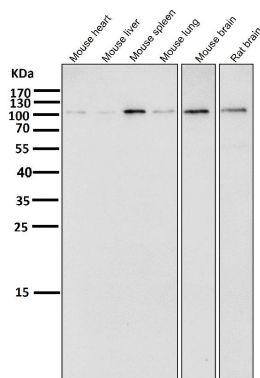
Additional Information

Gene ID	1788
Other Names	DNA (cytosine-5)-methyltransferase 3A, Dnmt3a, 2.1.1.37, Cysteine methyltransferase DNMT3A, 2.1.1.-, DNA methyltransferase HsaIIIA, DNA MTase HsaIIIA, M.HsaIIIA, DNMT3A
Calculated MW	101858
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..
Source	Eukaryota
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.
Clone Names	Clone: EOI-4
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.

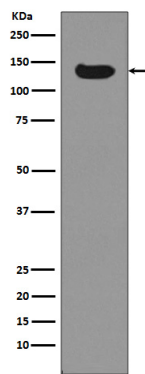
Protein Information

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

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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.