Data Sheet (Cat.No.TMAC-01169)

Anti-Dnmt3a Antibody (1X206)

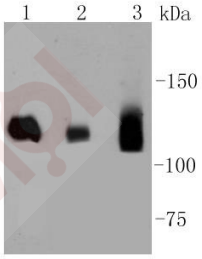
Product Details

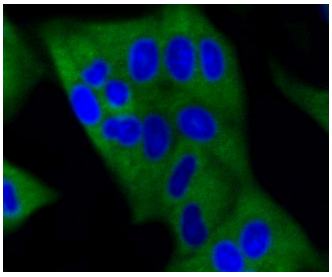
Ig Type:	IgG
Reactivity:	Human,Mouse,Rat
Conjugation:	Unconjugated
Molecular Weight:	Theoretical: 120 kDa.
Clone:	1X206
Purification:	ProA affinity purified

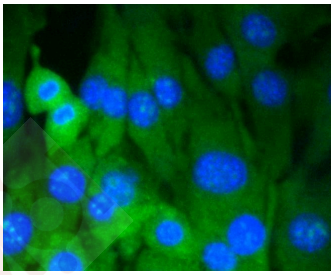
Applications

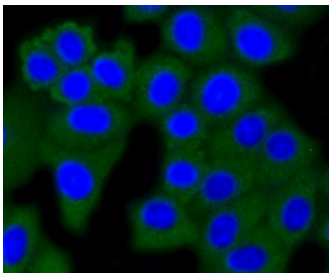
Verified Activity:

1. Western blot analysis of Dnmt3a on different lysates using anti-Dnmt3a antibody at 1/1,000 dilution. Positive control: Lane 1: Hela, Lane 2: Human brain, Lane 3: Human heart.
2. ICC staining Dnmt3a in Hela cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.
3. ICC staining Dnmt3a in NIH/3T3 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.
4. ICC staining Dnmt3a in HepG2 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.









Application:	FCM,ICC/IF,IHC,WB
Recommended	WB: 1:1000-5000; ICC/IF: 1:50-200

Properties

Stability & Storage:	Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.
Shipping:	Shipping with blue ice.

Antigen Details

Immunogen:	Recombinant Protein
Uniprot ID:	Q9Y6K1
Synonyms:	DNMT3A2;DNM3A_HUMAN;Dnmt3a;OTTHUMP00000201149;DNA (cytosine-5)-methyltransferase 3A;DNA MTase HsaIIIA;DNA methyltransferase 3a;DNA methyltransferase HsaIIIA;DNA cytosine methyltransferase 3A2;MCMT;DNA methyltransferase 3 alpha;M.HsaIIIA;DNMT 3a;DNMT;DNA (cytosine 5) methyltransferase 3A;DNA (cytosine 5) methyltransferase 3 alpha;TBRS

Research Background

Methylation at the 5'-position of cytosine is the only known naturally occurring covalent modification of the mammalian genome. DNA methylation requires the enzymatic activity of DNA 5-cytosine methyltransferase (Dnmt) proteins, which catalyze the transfer of a methyl group from S-adenosyl methionine to the 5'-position of cytosines residing in the dinucleotide CpG motif, and this methylation results in transcriptional repression of the target gene. The Dnmt enzymes are encoded by independent genes. Dnmt1 is the most abundant, and it preferentially methylates hemimethylated DNA and coordinates gene expression during development. Additional mammalian Dnmt proteins include Dnmt2 and Dnmt3. Dnmt2 lacks the large N-terminal regulator domain of Dnmt1, is expressed at substantially lower levels in adult tissues, and is likely involved in methylating newly integrated retroviral DNA. Dnmt3a and Dnmt3b are encoded by two distinct genes, but both are abundantly expressed in embryonic stem cells, where they also methylate CpG motifs on DNA.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481