Dnmt3a Rabbit mAb

Catalog No: #48869

Package Size: #48869-1 50ul #48869-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

Description

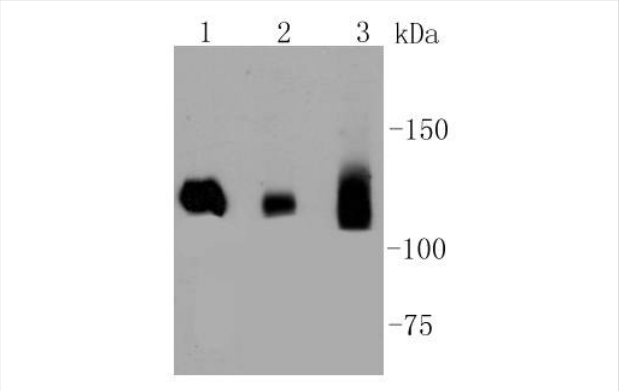
Product Name	Dnmt3a Rabbit mAb
Clone No.	ST04-78
Purification	ProA affinity purified
Applications	WB, ICC/IF,IHC,FC
Species Reactivity	Human Rat Mouse
Immunogen Description	recombinant protein
Other Names	DNA (cytosine 5) methyltransferase 3 alpha antibody DNA (cytosine 5) methyltransferase 3A antibody DNA (cytosine-5)-methyltransferase 3A antibody DNA cytosine methyltransferase 3A2 antibody DNA methyltransferase 3 alpha antibody DNA methyltransferase 3a antibody DNA methyltransferase HsaIIIA antibody DNA MTase HsaIIIA antibody DNM3A_HUMAN antibody DNMT 3a antibody DNMT antibody Dnmt3a antibody DNMT3A2 antibody M.HsaIIIA antibody MCMT antibody OTTHUMP00000201149 antibody TBRS antibody
Accession No.	Swiss-Prot#:Q9Y6K1
Calculated MW	120 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

Application Details

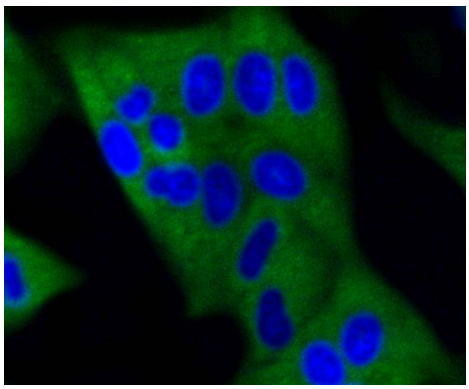
WB: 1:1,000-5,000

ICC: 1:50-1:200

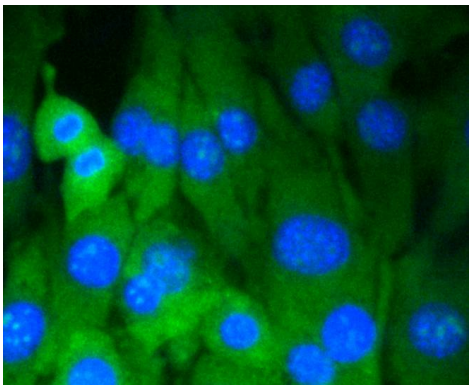
Images



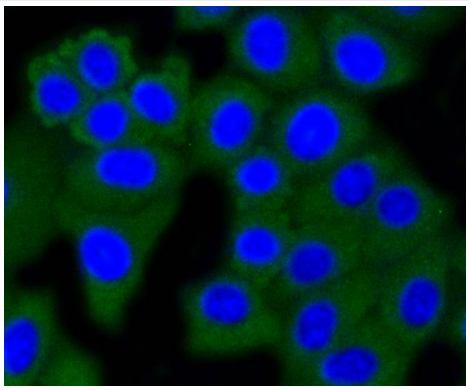
Western blot analysis of Dnmt3a on different lysates using anti-Dnmt3a antibody at 1/1,000 dilution. Positive control: Lane 1: Hela Lane 2: Human brain Lane 3: Human heart



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.



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.



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.

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.

References

1. Dunn J et al. Flow-dependent epigenetic DNA methylation regulates endothelial gene expression and atherosclerosis. J Clin Invest 124:3187-99 (2014).
2. Jefferson WN et al. Persistently altered epigenetic marks in the mouse uterus after neonatal estrogen exposure. Mol Endocrinol 27:1666-77 (2013).

Note: This product is for in vitro research use only and is not intended for use in humans or animals.