Dnmt1 Rabbit mAb

Catalog No: #49391

Package Size: #49391-1 50ul #49391-2 100ul

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

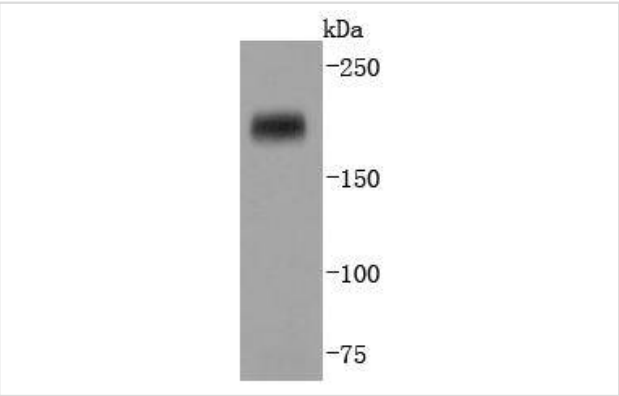
Description

Product Name	Dnmt1 Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal antibody
Clone No.	JF09-89
Purification	ProA affinity purified
Applications	WB, ICC/IF, IHC
Species Reactivity	Hu, Ms, Rt
Immunogen Description	recombinant protein
Other Names	ADCADN antibody AIM antibody CXXC finger protein 9 antibody CXXC-type zinc finger protein 9 antibody CXXC9 antibody DNA (cytosine 5) methyltransferase 1 antibody DNA (cytosine-5)-methyltransferase 1 antibody DNA methyltransferase 1 antibody DNA methyltransferase HsaI antibody DNA methyltransferase M.HsaI. antibody DNA MTase antibody DNA MTase HsaI antibody DNMT 1 antibody DNMT antibody Dnmt1 antibody DNMT1_HUMAN antibody Dnmt1o antibody FLJ16293 antibody HSN1E antibody M.HsaI antibody MCMT antibody Met1 antibody MGC104992 antibody mMmul antibody MommeD2 antibody
Accession No.	Swiss-Prot#:P26358
Calculated MW	183 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

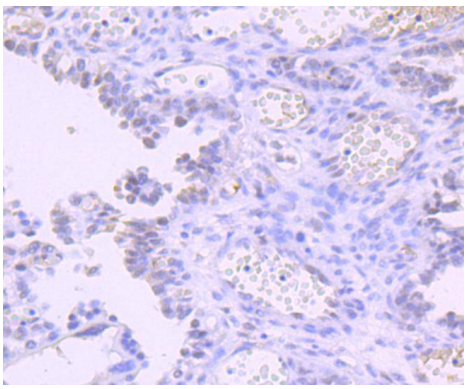
Application Details

WB: 1:1,000-1:2,000 IHC: 1:50-1:200ICC: 1:50-1:200

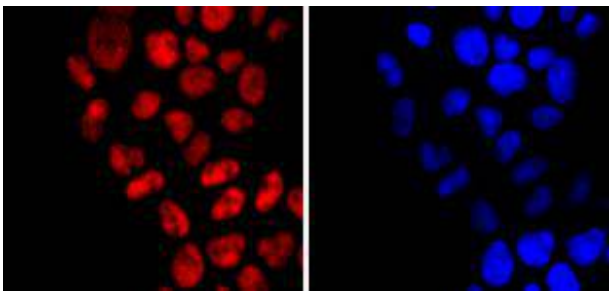
Images



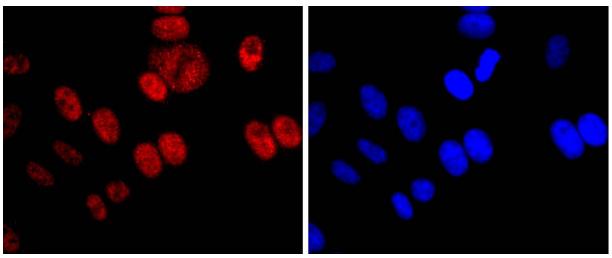
Western blot analysis of Dnmt1 on HepG2 cells lysates using anti-Dnmt1 antibody at 1/1,000 dilution.



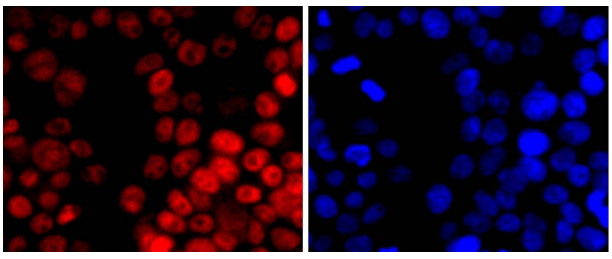
Immunohistochemical analysis of paraffin-embedded mouse placenta tissue using anti-Dnmt1 antibody. Counter stained with hematoxylin.



ICC staining Dnmt1 in Hela cells (red). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining Dnmt1 in HepG2 cells (red). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining Dnmt1 in 293T cells (red). 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. Liu R et al. Dnmt1 regulates the myogenic lineage specification of muscle stem cells. Sci Rep 6:35355 (2016). 2. Chalertpet K et al. Human papillomavirus type 16 E7 oncoprotein mediates CCNA1 promoter methylation. Cancer Sci 106:1333-40 (2015).

Published Papers

el at., Effect of mobile phone signal radiation on epigenetic modulation in the hippocampus of Wistar rat. In Environ Res on 2021 Jan by Ranjeet Kumar, Pravin S Deshmukh,et al..PMID:33035560, , (2021)

PMID:33035560

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