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Mouse Monoclonal Antibody Dnmt1 conjugated to Sepharose Beads

CatalogNo: ANT8362-S

Size 200ul

Storage Store at 4 °C for frequent use

Description

This Antagene antibody is immobilized via covalent binding of primary amino groups to N-hydroxysuccinimide (NHS)-activated sepharose beads. It is useful for immunoprecipitation assays.

Dnmt1 (ANT0042R) Rabbit mAb

Formulation: 50% slurry in PBS pH 7.2 with 0.01mg NaN3a3 preservative.

Host Species Reactivity Applications

Rabbit
 Human, Mouse, Rat,
 WB, IHC, IF, IP, ELISA

MW Isotype
• 183kD (Calculated) • IgG,Kappa

183kD (Observed)

Recommended Dilution Ratios

ΙP

Basic Information

Clonality Monoclonal

Clone Number ANT0042R

Immunogen Information \

Specificity Endogenous

Gene name DNMT1 AIM CXXC9 DNMT

Protein Name DNA (cytosine-5)-methyltransferase 1 (Dnmt1) (EC 2.1.1.37) (CXXC-type zinc finger protein

9) (DNA methyltransferase Hsal) (DNA MTase Hsal) (M.Hsal) (MCMT)

Organism	Gene ID	UniProt ID
Human	<u>1786</u> ;	<u>P26358</u> ;
Mouse		<u>P13864</u> ;
Rat		<u>Q9Z330</u> ;

Cellular Nucleus

Tissue specificity Ubiquitous; highly expressed in fetal tissues, heart, kidney, placenta, peripheral blood

and skeletal muscle. Isoform 2 is less expressed than isoform 1.,

mononuclear cells, and expressed at lower levels in spleen, lung, brain, small intestine, colon, liver, and skeletal muscle. Isoform 2 is less expressed than isoform 1.

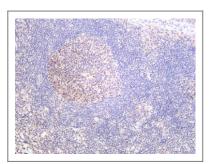
Function

Localization

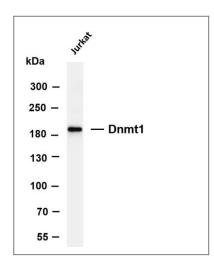
Catalytic activity:S-adenosyl-L-methionine + DNA = S-adenosyl-L-homocysteine + DNA containing 5-methylcytosine., Function:Methylates CpG residues. Preferentially methylates hemimethylated DNA. It is responsible for maintaining methylation patterns established in development. DNA methylation is coordinated with methylation of histones. Mediates transcriptional repression by direct binding to HDAC2., induction:Its abundance is reduced to non detectable levels at the G0 phase of the cell cycle and is dramatically induced upon entrance into the S-phase of the cell cycle., similarity:Belongs to the C5-methyltransferase family., similarity:Contains 1 CXXC-type zinc finger., similarity:Contains 2 BAH domains., subunit:Interacts with HDAC1 and with PCNA. Forms a complex with DMAP1 and HDAC2, with direct interaction. Forms also a stable complex with E2F1, BB1 and HDAC1.

Binds MBD2 and MBD3. Component of complexes containing SUV39H1. Interacts with DNMT3A and DNMT3B. Interacts with the PRC2/EED-EZH2 complex., tissue specificity:Ubiquitous; highly expressed in fetal tissues, heart, kidney, placenta, peripheral blood mononuclear cells, and expressed at lower levels in spleen, lung, brain, small intestine, colon, liver,

Validation Data



Human tonsil was stained with anti-Dnmt1 (ANT0042R) rabbit antibody



Various whole cell lysates were separated by 4-8% SDS-PAGE, and the membrane was blotted with anti-Dnmt1 (ANT0042R) antibody. The HRPconjugated Goat anti-Rabbit IgG(H+L) antibody was used to detect the antibody. Lane 1: Jurkat Predicted band size: 183kDa Observed band size:

183kDa

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Contact Antagene Inc Tel 1-866-964-2589 Email: info@antageneinc.com