



Rabbit Anti-DNMT1 monoclonal antibody, clone KG10-90 (CABT-L892)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Target	Dnmt1
Immunogen	Recombinant protein
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Human, Mouse, Rat
Clone	KG10-90
Purification	Protein A purified.
Conjugate	Unconjugated
Applications	WB, ICC/IF, IHC
Molecular Weight	183 kDa
Cellular Localization	Nucleus.
Positive Control	293T, Hela, HepG2, mouse placenta tissue.
Format	Liquid
Size	100 µl
Buffer	1×TBS (pH7.4), 1% BSA, 40% Glycerol.
Preservative	0.05% Sodium Azide

Storage

Store at +4°C after thawing. Aliquot store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.

BACKGROUND

Introduction

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.

Keywords

ADCADN;AIM;CXXC finger protein 9;CXXC-type zinc finger protein 9;CXXC9;DNA (cytosine 5) methyltransferase 1;DNA (cytosine-5)-methyltransferase 1;DNA methyltransferase 1;DNA methyltransferase Hsa1;DNA methyltransferase M.Hsa1.;DNA MTase;DNA MTase Hsa1;DNMT 1;DNMT;Dnmt1;DNMT1_HUMAN;Dnmt1o;FLJ16293;HSN1E;M.Hsa1;MCMT;Met1;MGC104992;mMmul;M antibody
