

DNMT1 recombinant antibody

DNMT1 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA243813	Rabbit	Human	Immunofluorescence, Immunohistochemistry, ELISA

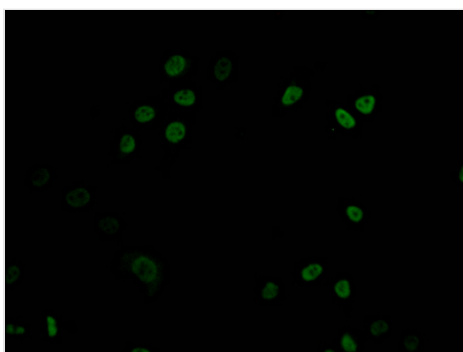
PRODUCT SYNONYMS

DNMT1; Monoclonal Recombinant Antibody; DNMT1 Antibody; DNA (cytosine-5)-methyltransferase 1 (Dnmt1) (EC 2.1.1.37) (CXXC-type zinc finger protein 9) (DNA methyltransferase Hsa1) (DNA MTase Hsa1) (M.Hsa1) (MCMT); AIM CXXC9 DNMT; DNMT1 recombinant antibody

PRODUCT SPECIFICATIONS

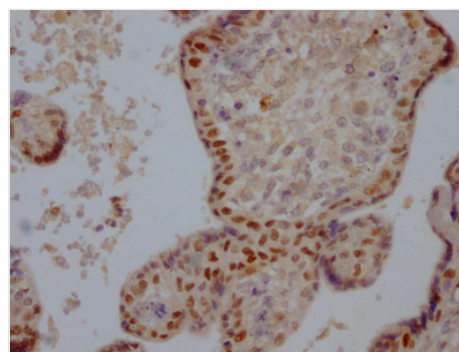
Host	Rabbit
Reactivity	Human
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Number	1A9
Purity/Purification	Affinity-chromatography
Form/Format	Liquid. Rabbit IgG in phosphate buffered saline, PH7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Applicable Applications for DNMT1 recombinant antibody	IF (Immunofluorescence), IHC (Immunohistochemistry), ELISA
Antibody Type	Recombinant Antibody
Conjugation	Non-conjugated
Immunogen	A synthesized peptide derived from human Dnmt1
Preparation and Storage	Upon receipt, store at -20 degree C or -80 degree C. Avoid repeated freeze.

IMAGES



IF (Immunofluorescence)

Immunofluorescence staining of HepG2 Cells at 1?50, counter-stained with DAPI. The cells were fixed in 4% formaldehyde, permeated by 0.2% TritonX-100, and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4 degree C. Nuclear DNA was labeled in blue with DAPI. The secondary antibody was FITC-conjugated AffiniPure Goat Anti-Rabbit IgG ?H+L?.



IHC (Immunohistochemistry)

IHC image diluted at 1:100 and staining in paraffin-embedded human placenta tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4 degree C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.

ADDITIONAL INFORMATION

Related Product Information for DNMT1 recombinant antibody	Methylates CpG residues. Preferentially methylates hemimethylated DNA. Associates with DNA replication sites in S phase maintaining the methylation pattern in the newly synthesized strand, that is essential for epigenetic inheritance. Associates with chromatin during G2 and M phases to maintain DNA methylation independently of replication. 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. In association with DNMT3B and via the recruitment of CTCFL/BORIS, involved in activation of BAG1 gene expression by modulating dimethylation of promoter histone H3 at H3K4 and H3K9. Probably forms a corepressor complex required for activated KRAS-mediated promoter hypermethylation and transcriptional silencing of tumor suppressor genes (TSGs) or other tumor-related genes in colorectal cancer (CRC) cells (PubMed:24623306). Also required to maintain a transcriptionally repressive state of genes in undifferentiated embryonic stem cells (ESCs) (PubMed:24623306). Associates at promoter regions of tumor suppressor genes (TSGs) leading to their gene silencing (PubMed:24623306). Promotes tumor growth (PubMed:24623306).
Product Categories/Family for DNMT1 recombinant antibody	Epigenetics and Nuclear Signaling

NCBI AND UNIPROT INFORMATION

NCBI GI #	12231019
NCBI GeneID	1786
UniProt Accession #	P26358; Q9UHG5; Q9ULA2; Q9UMZ6; A0AV63; B7ZLW6
Molecular Weight	1616
NCBI Official Full Name	DNA (cytosine-5)-methyltransferase 1
NCBI Official Synonym Full Names	DNA (cytosine-5-)-methyltransferase 1
NCBI Official Symbol	DNMT1
NCBI Official Synonym Symbols	AIM; DNMT; MCMT; CXXC9; HSN1E; ADCADN
NCBI Protein Information	DNA (cytosine-5)-methyltransferase 1; DNA (cytosine-5)-methyltransferase 1; m.HsaI; DNA MTase HsaI; DNA methyltransferase HsaI; CXXC-type zinc finger protein 9
UniProt Protein Name	DNA (cytosine-5)-methyltransferase 1
UniProt Gene Name	DNMT1
UniProt Synonym Gene Names	AIM; CXXC9; DNMT; Dnmt1; DNA MTase HsaI; M.HsaI
UniProt Entry Name	DNMT1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.