

DATASHEET

DNMT1 Rabbit Monoclonal Antibody(C1226)

CAT. NO. AMA00838

KEY FEATURES

Target	DNMT1	Source / Host	Rabbit
Reactivity	Human	Clonality	Monoclonal
Applications	WB, IF/ICC	Conjugation	Unconjugated
Form / Buffer	Liquid in PBS, pH 7.4, containing 50% glycerol, 0.2% BSA and 0.01% sodium azide.	Storage	at-20°C

BACKGROUND

DNA methyltransferase that 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 .

APPLICATION

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:1000
IF/ICC	1:50 - 1:200

*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

PRODUCT OVERVIEW

Description	Recombinant rabbit monoclonal antibody to DNMT1
Specificity	Recognizes endogenous levels of DNMT1 protein
Antibody Type	Primary antibody, Recombinant
Immunogen	KLH-conjugated synthetic peptide encompassing a sequence within human DNMT1. The exact sequence is proprietary.
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 183 kD; Observed: 183 kD
Form/Buffer	Liquid in PBS, pH 7.4, containing 50% glycerol, 0.2% BSA and 0.01% sodium azide.
Alternative Names	AIM; CXXC9; DNMT; DNA (cytosine-5)-methyltransferase 1; Dnmt1; CXXC-type zinc finger protein 9; DNA methyltransferase HsaI; DNA MTase HsaI; M.HsaI; MCMT
Gene Symbol	DNMT1
Entrez Gene	1786(Human)
SwissProt	P26358(Human)

*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact info@arexbio.com or your local distributor.

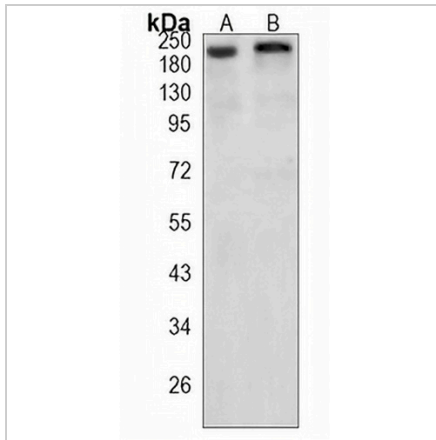
*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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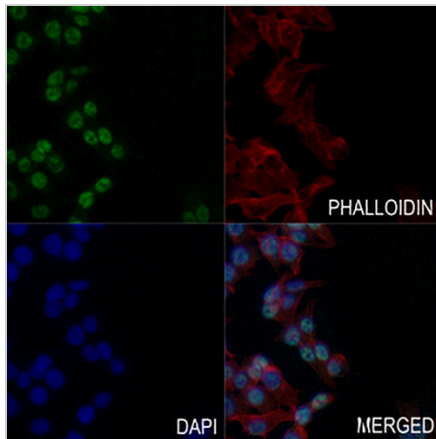
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Western blot analysis of DNMT1 expression in PC3 (A), THP1 (B) whole cell lysates. (Predicted band size: 183 kD; Observed band size: 183 kD)



Immunofluorescent analysis of DNMT1 staining in HCT116 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a AREX® Fluor 488 -conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AREX® Fluor 594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

STORAGE

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

NOTE

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.