

Anti-DNMT / DNMT1 Antibody (aa637-650, clone 60B1220.1)
Mouse Anti Human Monoclonal Antibody
Catalog # ALS17587**Specification**

Anti-DNMT / DNMT1 Antibody (aa637-650, clone 60B1220.1) - Product Information

Application	WB, IHC-P, IP, CHIP
Primary Accession Predicted	P26358 Human, Mouse, Rabbit, Monkey, Horse
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	183165

Anti-DNMT / DNMT1 Antibody (aa637-650, clone 60B1220.1) - Additional Information**Gene ID 1786****Alias Symbol** **DNMT1****Other Names**DNMT1, AIM, CXXC finger protein 9, CXXC9,
DNA methyltransferase 1, DNMT, DNA
methyltransferase Hsa1, DNA MTase Hsa1,
HSN1E, M.Hsa1, MCMT**Target/Specificity**A synthetic peptide corresponding to amino
acids 637-650 (EKDDREDKENAFKR) of
human Dnmt1 (Genbank Accession No.
NP_001370). It will cross react with mouse
Dnmt1.**Reconstitution & Storage**

Protein G purified

PrecautionsAnti-DNMT / DNMT1 Antibody (aa637-650,
clone 60B1220.1) is for research use only
and not for use in diagnostic or therapeutic
procedures.**Anti-DNMT / DNMT1 Antibody (aa637-650, clone 60B1220.1) - Protein Information****Name DNMT1**

Synonyms AIM, CXXC9, DNMT

Function

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).

Cellular Location

Nucleus.

Tissue Location

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

**Anti-DNMT / DNMT1 Antibody (aa637-650,
clone 60B1220.1) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)