

RP01992LQ

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Recombinant Human DNMT1(331-1103) Protein

Catalog No.: RP01992LQ

Recombinant

Sequence Information

Species	Gene ID	Swiss Prot
HEK293 cells	1786	P26358-2

Tags

NO-Tag

Synonyms

DNMT1; AIM; CXXC9; DNMT;DNA (cytosine-5)-methyltransferase 1; Dnmt1; EC:2.1.1.37; CXXC-type zinc finger protein 9; DNA methyltransferase HsaI; DNA MTase HsaI; M.HsaI; MCMT

Product Information

Source	Purification
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Endotoxin

< 0.1 EU/μg of the protein by LAL method.

Formulation

Supplied as a 0.22 μm filtered solution in 50 mM Tris-HCl, pH 7.5, 200 mM NaCl, 1 mM DTT, 1 mM EDTA, 50% glycerol.

Reconstitution

Background

DNMT1 (DNA (Cytosine-5-)-Methyltransferase 1) proteins are involved in DNA methylation in which a methyl group is added to a cytosine residue on DNA, commonly at the C5 position of a CpG dinucleotide. Three families of DNMTs have been identified: DNMT1, DNMT2, and DNMT3 (comprised of DNMT3A and DNMT3B).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.

Basic Information

Description

Recombinant Human DNMT1(331-1103) Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Glu331-Ala1103) of Human DNMT1 (Accession #NP_001124295.1)fused with No Tag.

Bio-Activity

Storage

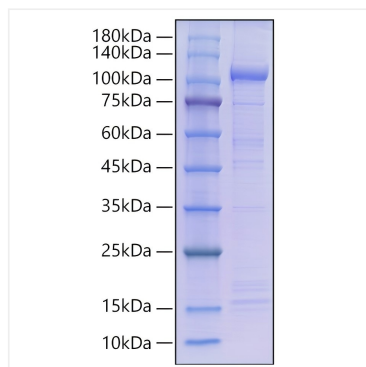
Store at -70°C. This product is stable at ≤ -70°C for up to 1 year from the date of receipt. For optimal storage, aliquot into smaller quantities after centrifugation and store at recommended temperature. Avoid repeated freeze-thaw cycles. Avoid repeated freeze/thaw cycles.

Contact



www.abclonal.com

Validation Data



Recombinant Human
DNMT1(331-1103) Protein was
determined by SDS-PAGE under
reducing conditions with Coomassie
Blue.