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Datasheet for ABIN7505473

DNMT1 Protein (AA 950-1142) (His tag)

Overview

Quantity:	100 µg
Target:	DNMT1
Protein Characteristics:	AA 950-1142
Origin:	Rat
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This DNMT1 protein is labelled with His tag.

Product Details

Sequence:	Phe950-Pro1142
Characteristics:	A DNA sequence encoding the Rat DNMT1 (Q9Z330-1) (Phe950-Pro1142) was expressed with a polyhistidine tag at the N-terminus.
Purity:	>80 % as determined by reducing SDS-PAGE.

Target Details

Target:	DNMT1
Alternative Name:	DNMT1 (DNMT1 Products)
Background:	Background: 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

Target Details

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. Also required to maintain a transcriptionally repressive state of genes in undifferentiated embryonic stem cells (ESCs). Associates at promoter regions of tumor suppressor genes (TSGs) leading to their gene silencing. Promotes tumor growth.

Synonym: DNA (cytosine-5)-methyltransferase 1,Dnmt1,Met-1,DNA methyltransferase Mmul,DNA MTase Mmul,M.Mmul,MCMT,Dnmt, Met1, Uim

Molecular Weight:	22.01 kDa
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UniProt:	Q9Z330
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Pathways:	SARS-CoV-2 Protein Interactome , The Global Phosphorylation Landscape of SARS-CoV-2 Infection
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Application Details

Restrictions:	For Research Use only
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Handling

Format:	Lyophilized
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Buffer:	Lyophilized from sterile PBS, pH 7.4.
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Storage:	4 °C,-20 °C,-80 °C
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Storage Comment:	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
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Expiry Date:	12 months
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