

Datasheet for ABIN7317610 **Dnmt2 Protein (GST tag)**



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Overview

Quantity:	100 µg
Target:	Dnmt2 (TRDMT1)
Origin:	Human
Source:	Baculovirus infected Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Dnmt2 protein is labelled with GST tag.

Product Details

Purpose:	Recombinant Human DNMT2/TRDMT1 Protein (GST Tag)
Sequence:	Met 1-Glu 391
Characteristics:	A DNA sequence encoding the human TRDMT1 isoform a (NP_004403.1) (Met 1-Glu 391) was fused with the GST tag at the N-terminus.
Purity:	> 94 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg as determined by the LAL method.

Target Details

Target:	Dnmt2 (TRDMT1)
Alternative Name:	DNMT2/TRDMT1 (TRDMT1 Products)
Background:	Background: DNMT2, also known as tRNA (cytosine-5-)-methyltransferase, DNA methyltransferase homolog HsaIIP, and TRDMT1, is a member of the DNA methyltransferase family of enzymes. DNMT2 enzymes have been widely conserved during evolution and contain

Target Details

all of the signature motifs of DNA (cytosine-5)-methyltransferases. It contains all 10 sequence motifs that are conserved among m(5)C MTases, including the consensus S'-adenosyl-L-methionine-binding motifs and the active site ProCys dipeptide, and its structure is very similar to prokaryotic DNA methyltransferases. DNMT2 has close homologs in plants, insects and *Schizosaccharomyces pombe*, but no related sequence can be found in the genomes of *Saccharomyces cerevisiae* or *Caenorhabditis elegans*. While the biological function of DNMT2 is not yet known, the strong binding to DNA suggests that DNMT2 may mark specific sequences in the genome by binding to DNA through the specific target-recognizing motif. However, the DNA methyltransferase activity of these proteins is comparatively weak and their biochemical and functional properties remain enigmatic. Recent evidence now shows that Dnmt2 has a novel tRNA methyltransferase activity, raising the possibility that the biological roles of these proteins might be broader than previously thought.

Synonym: DMNT2,DNMT2,MHSAIP,PUMET,RNMT1

Molecular Weight: 71 kDa

NCBI Accession: [NP_004403](#)

Application Details

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Please refer to the printed manual for detailed information.

Buffer: Lyophilized from sterile 50 mM Tris, 100 mM NaCl, 0.5 mM GSH, 0.5 mM PMSF, pH 8.0

Storage: 4 °C,-20 °C,-80 °C

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.