

37-1128: Human DNMT2 / TRDMT1 Recombinant Protein (GST Tag)(Discontinued)

Reactivity : Human

Alternative Name : DNMT2 Protein, DNMT2 Protein, MHSAlIP Protein, PUMET Protein, RNMT1 Protein,

Description

Source : Baculovirus-Insect Cells

DNMT2, also known as tRNA (cytosine-5-)-methyltransferase, DNA methyltransferase homolog HsAlIP, and TRDMT1, is a member of the DNA methyltransferase family of enzymes. DNMT2 enzymes have been widely conserved during evolution and contain all of the signature motifs of DNA (cytosine-5)-methyltransferases. It contains all 1 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.

Product Info

Amount : Human DNMT2 / TRDMT1 Recombinant Protein (GST Tag)(Discontinued) / 100 µg

Purification : > 94 % as determined by SDS-PAGE

Content : Formulation Lyophilized from sterile 50mM Tris, 100mM NaCl, 0.5mM GSH, 0.5mM PMSF, pH 8.0
Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.

Storage condition : Store it under sterile conditions at -20°C to -80°C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

Amino Acid : Met1-Glu391

Application Note

Endotoxin :< 1.0 EU per μg of the protein as determined by the LAL method

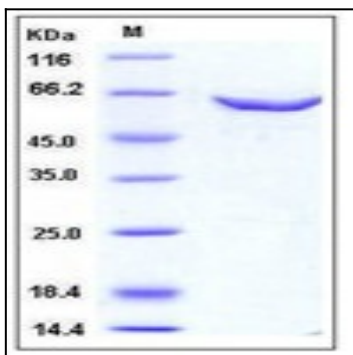


Fig 1: Human DNMT2 / TRDMT1 Recombinant Protein (GST Tag)