

## **Dnmt2 Antibody Blocking Peptide**

Synthetic peptide Catalog # BP1021b

## **Specification**

## **Dnmt2 Antibody Blocking Peptide - Product Information**

**Primary Accession** 

014717

## **Dnmt2 Antibody Blocking Peptide - Additional Information**

**Gene ID 1787** 

#### **Other Names**

tRNA (cytosine(38)-C(5))-methyltransferase, DNA (cytosine-5)-methyltransferase-like protein 2, Dnmt2, DNA methyltransferase homolog HsallP, DNA MTase homolog HsallP, MHsallP, PuMet, TRDMT1, DNMT2

#### Target/Specificity

The synthetic peptide sequence used to generate the antibody <a href=/product/products/AP1021b>AP1021b</a> was selected from the region of human Dnmt2. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

#### **Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

#### **Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

# **Dnmt2 Antibody Blocking Peptide - Protein Information**

#### Name TRDMT1

**Synonyms** DNMT2 {ECO:0000303|PubMed:16424344}

#### **Function**

Specifically methylates cytosine 38 in the anticodon loop of tRNA(Asp) (PubMed:<a href="http://www.uniprot.org/citations/16424344" target="\_blank">16424344</a>). Has higher activity on tRNA(Asp) modified with queuosine at position 34 (PubMed:<a href="http://www.uniprot.org/citations/30093495" target=" blank">30093495</a>).

## **Cellular Location**

Cytoplasm.



### **Tissue Location**

Ubiquitous. Higher expression in testis, ovary and thymus and at much lower levels in spleen, prostate, colon, small intestine, and peripheral blood leukocytes

## **Dnmt2 Antibody Blocking Peptide - Protocols**

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

# • Blocking Peptides

## **Dnmt2 Antibody Blocking Peptide - Images**

## **Dnmt2 Antibody Blocking Peptide - Background**

CpG methylation is an epigenetic modification that is important for embryonic development, imprinting, and X-chromosome inactivation. Studies in mice have demonstrated that DNA methylation is required for mammalian development. This gene encodes a protein with similarity to DNA methyltransferases, but this protein does not display methyltransferase activity. The protein strongly binds DNA, suggesting that it may mark specific sequences in the genome. Alternative splicing results in multiple transcript variants encoding different isoforms.

# **Dnmt2 Antibody Blocking Peptide - References**

Hermann, A., et al., J. Biol. Chem. 278(34):31717-31721 (2003).Franchina, M., et al., Int. J. Biochem. Cell Biol. 33(11):1104-1115 (2001).Dong, A., et al., Nucleic Acids Res. 29(2):439-448 (2001).Yoder, J.A., et al., Hum. Mol. Genet. 7(2):279-284 (1998).Van den Wyngaert, I., et al., FEBS Lett. 426(2):283-289 (1998).