

Dnmt2 Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP1021b

Specification

Dnmt2 Antibody - Product Information

Application
Primary Accession
Reactivity
Host
Clonality
Isotype
Antigen Region

IHC-P, WB,E
O14717
Human, Mouse
Rabbit
Polyclonal
Rabbit IgG
346-375

Dnmt2 Antibody - 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

This Dnmt2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 346-375 amino acids from human Dnmt2.

Dilution

IHC-P~~1:50~100 WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Dnmt2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Dnmt2 Antibody - Protein Information

Name TRDMT1

Synonyms DNMT2 {ECO:0000303|PubMed:16424344}





Function Specifically methylates cytosine 38 in the anticodon loop of tRNA(Asp) (PubMed: 16424344). Has higher activity on tRNA(Asp) modified with queuosine at position 34 (PubMed: 30093495).

Cellular Location Cytoplasm.

Tissue Location

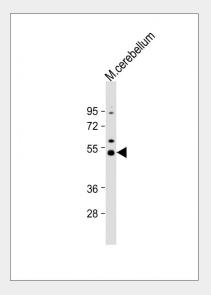
Ubiquitous. Higher expression in testis, ovary and thymus and at much lower levels in spleen, prostate, colon, small intestine, and peripheral blood leukocytes

Dnmt2 Antibody - Protocols

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

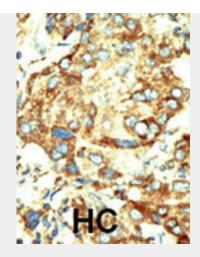
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

Dnmt2 Antibody - Images



Anti-Dnmt2 Antibody (P361) at 1:1000 dilution + mouse cerebellum lysate Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 45 kDa Blocking/Dilution buffer: 5% NFDM/TBST.





Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

Dnmt2 Antibody - 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 - 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).

Dnmt2 Antibody - Citations

• Presence of 5-methylcytosine in CpNpG trinucleotides in the human genome.