

Dnmt2 Antibody

Rabbit Polyclonal Antibody Catalog # ABV10357

Specification

Dnmt2 Antibody - Product Information

Application WB, IF Primary Accession O55055

Reactivity
Host
Clonality
Polyclonal
Isotype
Rabbit IgG

Calculated MW 46794

Dnmt2 Antibody - Additional Information

Gene ID 13434

Application & Usage Western blotting (0.5-4 μg/ml) and

immunofluorescence. However, the optimal concentrations should be determined individually. The antibody recognizes 42 kDa Dnmt 2 of human and mouse origins. Mouse testes tissue lysate can be use as a

positive control.

Other Names

Dnmt2, TRDMT1, RNMT1, OTTHUMP00000045198, cytosine-5-methyltransferase, EC 2.1.1.29

Target/Specificity

DNMT2

Antibody Form

Liquid

Appearance

Colorless liquid

Formulation

 $100~\mu g$ (0.5 mg/ml) affinity purified rabbit polyclonal antibody in phosphate-buffered saline (PBS) containing 30% glycerol, 0.5% BSA, and 0.01% thimerosal.

Handling

The antibody solution should be gently mixed before use.

Reconstitution & Storage

-20 °C

Background Descriptions



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}, Met

Function

Specifically methylates cytosine 38 in the anticodon loop of tRNA(Asp) (PubMed:21183079, PubMed:22885326, PubMed:26271101). Has higher activity on tRNA(Asp) modified with queuosine at position 34 (By similarity).

Cellular Location

Cytoplasm {ECO:0000250|UniProtKB:014717}.

Tissue Location

Highly expressed in thymus, testis, and at much lower levels in spleen, lung, brain, heart, kidney, liver, skeletal muscle and embryonic stem cells.

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
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Dnmt2 Antibody - Images

Dnmt2 Antibody - Background

Methylation of DNA at cytosine residues plays an important role in regulation of gene expression, genomic imprinting and is essential for mammalian development. Hypermethylation of CpG islands in tumor suppressor genes or hypomethylation of bulk genomic DNA may be linked with development of cancer. To date, 3 families of mammalian DNA methyltransferase genes have been identified which include Dnmt1, Dnmt2 and Dnmt3. Dnmt1 is constitutively expressed in proliferating cells and inactivation of this gene causes global demethylation of genomic DNA and embryonic lethality. Dnmt2 is expressed at low levels in adult tissues and its inactivation does not affect DNA methylation or maintenance of methylation. Dnmt2 contains all the sequence motifs diagnostic of DNA (cytosine-5)-methyltransferases but appears to lack the large N-terminal regulatory domain common to other eukaryotic methyltransferases.