Anti-DNMT3B (N-terminal) polyclonal antibody (DPABH-13151)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

**Antigen Description**
Required for genome wide de novo methylation and is essential for the establishment of DNA methylation patterns during development. DNA methylation is coordinated with methylation of histones. May preferentially methylates nucleosomal DNA within the nucleosome core region. May function as transcriptional co-repressor by associating with CBX4 and independently of DNA methylation. Seems to be involved in gene silencing (By similarity). In association with DNMT1 and via the recruitment of CTCFL/BORIS, involved in activation of BAG1 gene expression by modulating dimethylation of promoter histone H3 at H3K4 and H3K9. Isoforms 4 and 5 are probably not functional due to the deletion of two conserved methyltransferase motifs.

**Immunogen**
Synthetic peptide derived from the N terminal region of Human Dnmt3b, conjugated to KLH

**Isotype**
IgG

**Source/Host**
Rabbit

**Species Reactivity**
Human

**Purification**
Immunogen affinity purified

**Conjugate**
Unconjugated

**Applications**
WB, IHC-P, ICC/IF

**Format**
Liquid

**Size**
50 μg

**Buffer**
pH: 7.40; Constituents: 48% PBS, 0.88% Sodium chloride, 50% Glycerol. Note: PBS is without Mg2+, Ca2+

**Preservative**
0.02% Sodium Azide

**Storage**

GENE INFORMATION
<table>
<thead>
<tr>
<th><strong>Gene Name</strong></th>
<th>DNMT3B DNA (cytosine-5-)-methyltransferase 3 beta [ Homo sapiens ]</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Official Symbol</strong></td>
<td>Dnmt3b</td>
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<tr>
<td><strong>Synonyms</strong></td>
<td>DNMT3B; DNA (cytosine-5-)-methyltransferase 3 beta; DNA (cytosine-5)-methyltransferase 3B; DNA MTase HsallIB; DNA methyltransferase HsallIB; ICF; ICF1; M.HsallIB;</td>
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<td><strong>Entrez Gene ID</strong></td>
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<td><strong>Protein Refseq</strong></td>
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<td><strong>UniProt ID</strong></td>
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<td><strong>Chromosome Location</strong></td>
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<td><strong>Pathway</strong></td>
<td>Cysteine and methionine metabolism; Metabolic pathways; Methionine degradation; One Carbon Metabolism;</td>
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<tr>
<td><strong>Function</strong></td>
<td>DNA (cytosine-5)-methyltransferase activity; DNA (cytosine-5)-methyltransferase activity, acting on CpG substrates; DNA binding; DNA-methyltransferase activity; metal ion binding; protein binding; transcription corepressor activity</td>
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</tbody>
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