abcam

Product datasheet

Anti-Dnmt3b antibody ab2851

★★★★★ <u>5 Abreviews</u> <u>124 References</u> 5 图像

概述

产**品名称** Anti-Dnmt3b**抗体**

描述 兔多克隆抗体to Dnmt3b

宿主 Rabbit

特异性 This antibody detects DNA methyltransferase 3b (Dnmt3b) from human and mouse tissues and

cells as well as recombinant human Dnmt3b. This antibody detects, to a lesser extent, full-length

human recombinant Dnmt3a.

适用于: IHC-P, WB

种属反应性 与反应: Mouse, Human

免疫原 Synthetic peptide corresponding to Mouse Dnmt3b aa 1-100.

Database link: **O88509**

Run BLAST with
Run BLAST with

常规说明

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

性能

形式 Liquid

存放说明 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

存储溶液 Preservative: 0.05% Sodium azide

Constituents: 0.1% BSA, 99% PBS

纯**度** Immunogen affinity purified

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The Abpromise guarantee

Abpromise™承诺保证使用ab2851于以下的经测试应用

"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
IHC-P	★★★★ <u>(1)</u>	1/100 - 1/1000.
WB	★★★★ (1)	Use a concentration of 2 µg/ml. Predicted molecular weight: 97.5 kDa.

功能

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.

组织特异性

Ubiquitous; highly expressed in fetal liver, heart, kidney, placenta, and at lower levels in spleen, colon, brain, liver, small intestine, lung, peripheral blood mononuclear cells, and skeletal muscle. Isoform 1 is expressed in all tissues except brain, skeletal muscle and PBMC, 3 is ubiquitous, 4 is expressed in all tissues except brain, skeletal muscle, lung and prostate and 5 is detectable only in testis and at very low level in brain and prostate.

疾病相关

Defects in DNMT3B are a cause of immunodeficiency-centromeric instability-facial anomalies syndrome (ICF) [MIM:242860]. ICF is a rare autosomal recessive disorder characterized by a variable immunodeficiency, mild facial anomalies, and centromeric heterochromatin instability involving chromosomes 1, 9, and 16. ICF is biochemically characterized by hypomethylation of CpG sites in some regions of heterochromatin.

序列相似性

Belongs to the C5-methyltransferase family.

Contains 1 ADD domain.

Contains 1 GATA-type zinc finger. Contains 1 PHD-type zinc finger. Contains 1 PWWP domain.

结构域

The PWWP domain is essential for targeting to pericentric heterochromatin.

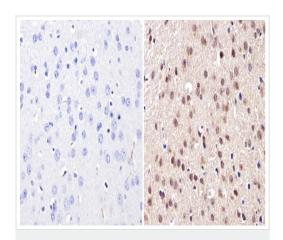
翻译后修饰

Sumoylated.

细胞定位

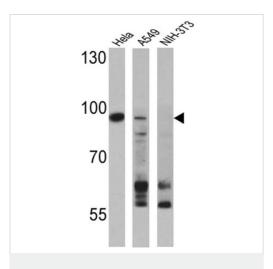
Nucleus.

图片



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Dnmt3b antibody (ab2851)

ab2851 labellling Dnmt3b in the nucleus of Mouse brain tissue (right) compared with a negative control (left) by Immunohistochemistry (formalin/PFA-fixed paraffin-embedded sections). To expose target proteins, antigen retrieval method was performed using 10mM sodium citrate (pH 6.0) microwaved for 8-15 min. Tissues were blocked in 3% H2O2-methanol for 15 min at room temperature, washed with ddH2O and PBS. Tissue sections were incubated with primary antibody (1:200 in 3% BSA-PBS) overnight at 4°C. A HRP-conjugated anti-rabbit was used as the secondary antibody, followed by colorimetric detection using a DAB kit. Tissues were counterstained with hematoxylin and dehydrated with ethanol and xylene to prep for mounting.



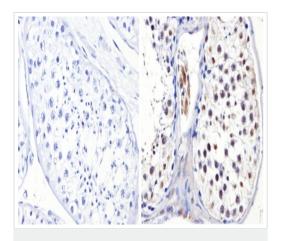
Western blot - Anti-Dnmt3b antibody (ab2851)

All lanes: Anti-Dnmt3b antibody (ab2851) at 1/1000 dilution

Lane 1 : HeLa cell lysate
Lane 2 : A549 cell lysate
Lane 3 : NIH-3T3 cell lysate

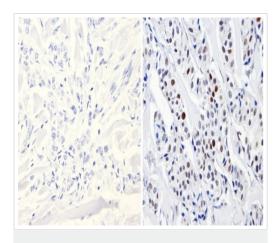
Lysates/proteins at 25 µg per lane.

Predicted band size: 97.5 kDa **Observed band size:** 97 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Dnmt3b antibody (ab2851)

ab2851 labellling Dnmt3b in the nucleus of Human testis tissue (right) compared with a negative control (left) by Immunohistochemistry (formalin/PFA-fixed paraffin-embedded sections). To expose target proteins, antigen retrieval method was performed using 10mM sodium citrate (pH 6.0) microwaved for 8-15 min. Tissues were blocked in 3% H2O2-methanol for 15 min at room temperature, washed with ddH2O and PBS. Tissue sections were incubated with primary antibody (1:500 in 3% BSA-PBS) overnight at 4°C. A HRP-conjugated anti-rabbit was used as the secondary antibody, followed by colorimetric detection using a DAB kit. Tissues were counterstained with hematoxylin and dehydrated with ethanol and xylene to prep for mounting.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Dnmt3b antibody (ab2851)

ab2851 labellling Dnmt3b in the nucleus and cytoplasm of Human breast carcinoma (right) compared with a negative control (left) by Immunohistochemistry (formalin/PFA-fixed paraffin-embedded sections). To expose target proteins, antigen retrieval method was performed using 10mM sodium citrate (pH 6.0) microwaved for 8-15 min. Tissues were blocked in 3% H2O2-methanol for 15 min at room temperature, washed with ddH2O and PBS. Tissue sections were incubated with primary antibody (1:500 in 3% BSA-PBS) overnight at 4°C. A HRP-conjugated anti-rabbit was used as the secondary antibody, followed by colorimetric detection using a DAB kit. Tissues were counterstained with hematoxylin and dehydrated with ethanol and xylene to prep for mounting.



Western blot - Anti-Dnmt3b antibody (ab2851)

All lanes: Anti-Dnmt3b antibody (ab2851) at 1 µg/ml

Lane 1 : A498 (Human Kidney Carcinoma) Whole Cell Lysate

Lane 2 : JEG-3 (Human placental choriocarcinoma cell line) Whole

Cell Lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) preadsorbed (ab97080) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 97.5 kDa **Observed band size:** 97.5 kDa

Additional bands at: 32 kDa, 46 kDa. We are unsure as to the

identity of these extra bands.

Exposure time: 2 minutes

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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