abcam

Product datasheet

Anti-Dnmt3a antibody [EPR18455] - BSA and Azide free ab232391

敲除验证 重组 RabMAb

2 References 8 图像

概述

产品名称	Anti-Dnmt3a抗体[EPR18455] - BSA and Azide free
描述	兔单克隆抗体[EPR18455] to Dnmt3a - BSA and Azide free
宿主	Rabbit
经测试应用	**适用于:** Flow Cyt (Intra), WB, ICC/IF, IHC-P
种属反应性	**与反应:** Mouse, Rat, Human
阳性对照	WB: HEK-293T, HAP1 and HeLa whole cell lysate; Mouse brain tissue lysate. IHC-P: human placenta, rat spleen and mouse testis
常规说明	ab232391 is the carrier-free version of **ab188470**. Our **carrier-free** antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications. Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold. This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc. This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information **see here**. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C. Do Not Freeze.
存储溶液	pH: 7.2 Constituent: PBS
无载体	是
纯度	Protein A purified
克隆	单克隆
克隆编号	EPR18455
同种型	IgG

应用

The Abpromise guarantee Abpromise™承诺保证使用ab232391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。

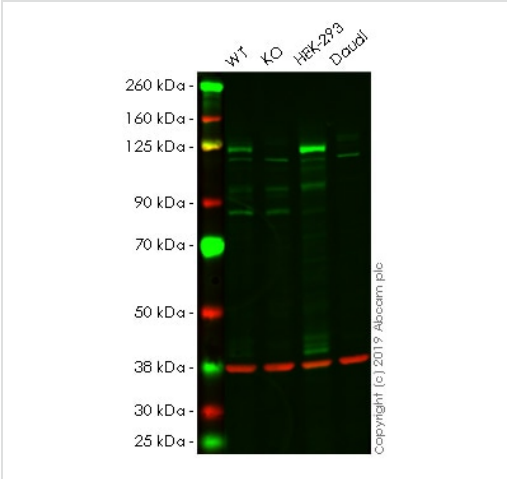
应用	Ab评论	说明
Flow Cyt (Intra)		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Predicted molecular weight: 102 kDa.
ICC/IF		Use at an assay dependent concentration.
IHC-P		1/2000. Perform heat mediated antigen retrieval using **ab93684** (Tris/EDTA buffer, pH 9.0).

靶标

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. It modifies DNA in a non-processive manner and also methylates non-CpG sites. May preferentially methylate DNA linker between 2 nucleosomal cores and is inhibited by histone H1. Plays a role in paternal and maternal imprinting. Required for methylation of most imprinted loci in germ cells. Acts as a transcriptional corepressor for ZNF238. Can actively repress transcription through the recruitment of HDAC activity.
组织特异性	Highly expressed in fetal tissues, skeletal muscle, heart, peripheral blood mononuclear cells, kidney, and at lower levels in placenta, brain, liver, colon, spleen, small intestine and lung.
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; sumoylation disrupts the ability to interact with histone deacetylases (HDAC1 and HDAC2) and repress transcription.
细胞定位	Nucleus. Cytoplasm. Accumulates in the major satellite repeats at pericentric heterochromatin.

图片



Western blot - Anti-Dnmt3a antibody [EPR18455] - BSA and Azide free (ab232391)

All lanes : Anti-Dnmt3a antibody [EPR18455] (**ab188470**) at 1/2000 dilution

Lane 1 : Wild-type HeLa cell lysate
Lane 2 : Dnmt3a knockout HeLa cell lysate
Lane 3 : HEK-293 cell lysate
Lane 4 : Daudi cell lysate

Lysates/proteins at 20 µg per lane.

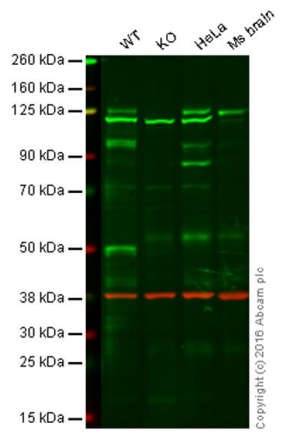
Performed under reducing conditions.

Predicted band size: 102 kDa

This data was developed using the same antibody clone in a different buffer formulation (**ab188470**).

Lanes 1-4: Merged signal (red and green). Green - **ab188470** observed at 125 kDa. Red - loading control **ab8245** observed at 37 kDa.

ab188470 Anti-Dnmt3a antibody [EPR18455] was shown to specifically react with Dnmt3a in wild-type HeLa cells. Loss of signal was observed when knockout cell line **ab261793** (knockout cell lysate **ab257128**) was used. Wild-type and Dnmt3a knockout samples were subjected to SDS-PAGE. **ab188470** and Anti-GAPDH antibody [6C5] - Loading Control (**ab8245**) were incubated overnight at 4°C at 1 in 2000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (**ab216776**) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-Dnmt3a antibody [EPR18455] - BSA and Azide free (ab232391)

All lanes : Anti-Dnmt3a antibody [EPR18455] (**ab188470**) at 1/5000 dilution

Lane 1 : Wild-type HAP1 cell lysate
Lane 2 : Dnmt3a knockout HAP1 cell lysate
Lane 3 : HeLa cell lysate
Lane 4 : Mouse brain tissue lysate

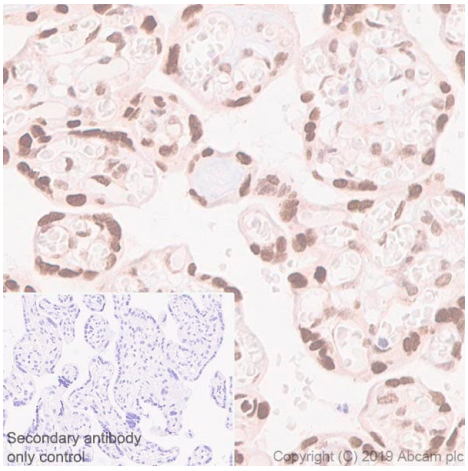
Lysates/proteins at 20 µg per lane.

Predicted band size: 102 kDa

Lanes 1 - 4: Merged signal (red and green). Green - **ab188470** observed at 125 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

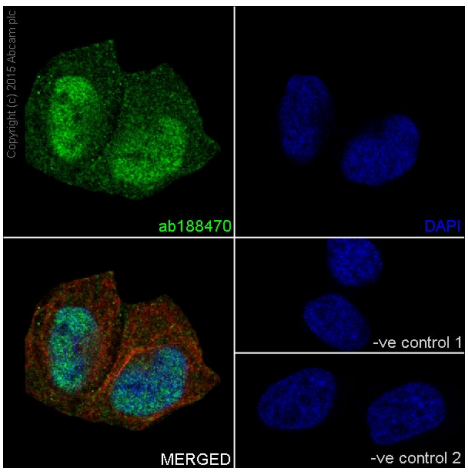
ab188470 was shown to recognize Dnmt3a when Dnmt3a knockout samples were used, along with additional cross-reactive bands. Wild-type and Dnmt3a knockout samples were subjected to SDS-PAGE. **ab188470** and **ab8245** (loading control to GAPDH) were diluted to 1/5000 and 1/10000 respectively and incubated overnight at 4°C. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (**ab216776**) secondary antibodies at 1/10000 dilution for 1 hour at room temperature before imaging.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab188470**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Dnmt3a antibody [EPR18455] - BSA and Azide free (ab232391)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human placenta tissue sections labeling Dnmt3a with purified **ab188470** at 1/2000 (0.409 µg/ml). Antigen retrieval was heat mediated using **ab93684** (Tris/EDTA buffer, pH 9.0). Goat Anti-Rabbit IgG H&L (HRP) was used as the secondary antibody. Hematoxylin was used as a counterstain.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab188470**).

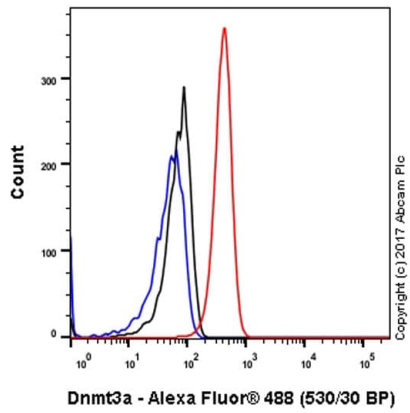


Immunocytochemistry/ Immunofluorescence - Anti-Dnmt3a antibody [EPR18455] - BSA and Azide free (ab232391)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HeLa (Human epithelial cells from cervix adenocarcinoma) cells labeling Dnmt3a with **ab188470** at 1/1000 dilution, followed by Goat anti-rabbit IgG (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (green). Confocal image showing nuclear and weakly cytoplasmic staining on HeLa cell line. The nuclear counter stain is DAPI (blue). Tubulin is detected with **ab7291** (anti-Tubulin mouse mAb) at 1/1000 dilution and **ab150120** (AlexaFluor®594 Goat anti-Mouse secondary) at 1/1000 dilution (red).

The negative controls are as follows:
-ve control 1: **ab188470** at 1/1000 dilution followed by **ab150120** (AlexaFluor®594 Goat anti-Mouse secondary) at 1/1000 dilution.
-ve control 2: **ab7291** (anti-Tubulin mouse mAb) at 1/1000 dilution followed by **ab150077** (Alexa Fluor®488 Goat Anti-Rabbit IgG H&L) at 1/1000 dilution.

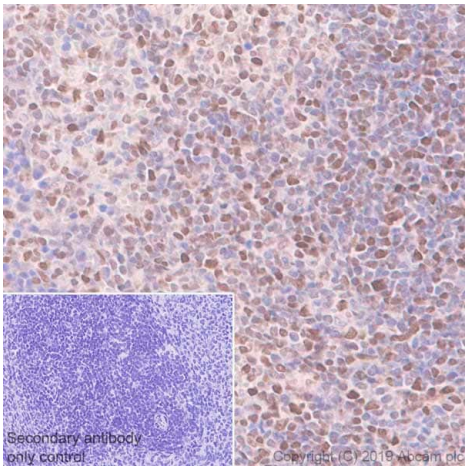
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab188470**).



Flow Cytometry (Intracellular) - Anti-Dnmt3a antibody [EPR18455] - BSA and Azide free (ab232391)

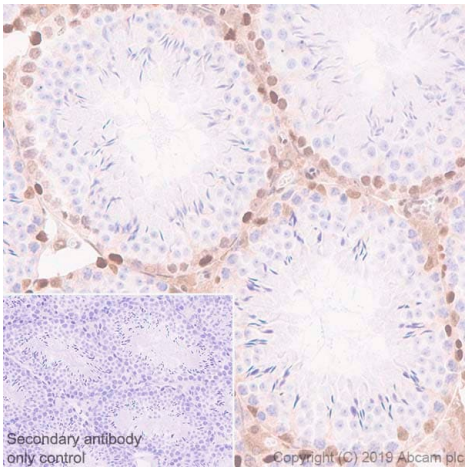
Intracellular Flow Cytometry analysis of HeLa (human cervix adenocarcinoma) cells labeling Dnmt3a with purified **ab188470** at 1/80 dilution (10ug/ml) (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. A Goat anti rabbit IgG (Alexa Fluor® 488) (1/2000 dilution) was used as the secondary antibody. Rabbit monoclonal IgG (Black) was used as the isotype control, cells without incubation with primary antibody and secondary antibody (Blue) were used as the unlabeled control.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab188470**).



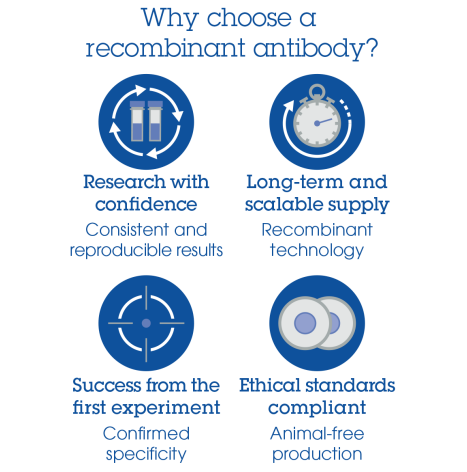
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Dnmt3a antibody [EPR18455] - BSA and Azide free (ab232391)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat spleen tissue sections labeling Dnmt3a with purified **ab188470** at 1/2000 (0.409 µg/ml). Antigen retrieval was heat mediated using **ab93684** (Tris/EDTA buffer, pH 9.0). Goat Anti-Rabbit IgG H&L (HRP) was used as the secondary antibody. Hematoxylin was used as a counterstain.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab188470**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Dnmt3a antibody [EPR18455] - BSA and Azide free (ab232391)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse testis tissue sections labeling Dnmt3a with purified **ab188470** at 1/2000 (0.409 µg/ml). Antigen retrieval was heat mediated using **ab93684** (Tris/EDTA buffer, pH 9.0). Goat Anti-Rabbit IgG H&L (HRP) was used as the secondary antibody. Hematoxylin was used as a counterstain.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab188470**).



Anti-Dnmt3a antibody [EPR18455] - BSA and Azide free (ab232391)

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