abcam

Product datasheet

Anti-PRMT5 antibody [EPR5772] - BSA and Azide free ab215364

יובעדער RabMAb

2 References 画像数8

製品の概要

製品名 Anti-PRMT5 antibody [EPR5772] - BSA and Azide free

製品の詳細 Rabbit monoclonal [EPR5772] to PRMT5 - BSA and Azide free

由来種 Rabbit

適用あり: Flow Cyt (Intra), WB, IHC-P, ICC/IF, IP アプリケーション

種交差性 交差種: Mouse. Rat. Human

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

ポジティブ・コントロール WB: HEK-293, HepG2, HeLa, and NIH/3T3 cell lysates; mouse and rat brain tissue lysate. ICC/IF:

HepG2 and HeLa cells. IHC-P: Human infiltrating duct carcinoma of breast tissue, mouse liver

tissue. Flow Cyt (intra): HeLa cells. IP: Mouse brain cell.

特記事項 ab215364 is the carrier-free version of ab109451.

> 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 cellbased 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**.

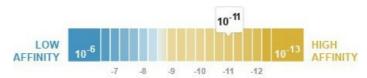
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製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C. Do Not Freeze.

解離定数(K_D 値) $K_D = 6.70 \times 10^{-11} M$



Learn more about K_D

バッファー pH: 7.20

Constituent: PBS

キャリア・フリー はい

精製度 Protein A purified

ポリ/モノ モノクローナル **クローン名** EPR5772

アイソタイプ lgG

アプリケーション

The Abpromise guarantee Abpromise保証は、次のテスト済みアプリケーションにおけるab215364の使用に適用されますアプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
Flow Cyt (Intra)		Use at an assay dependent concentration. ab199376 - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody.
WB		Use at an assay dependent concentration. Detects a band of approximately 72 kDa (predicted molecular weight: 73 kDa).
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See IHC antigen retrieval protocols.
ICC/IF		Use at an assay dependent concentration.
IP		Use at an assay dependent concentration.

ターゲット情報

機能

Arginine methyltransferase that can both catalyze the formation of omega-N monomethylarginine (MMA) and symmetrical dimethylarginine (sDMA), with a preference for the formation of MMA.

Specifically mediates the symmetrical dimethylation of arginine residues in the small nuclear ribonucleoproteins Sm D1 (SNRPD1) and Sm D3 (SNRPD3); such methylation being required for the assembly and biogenesis of snRNP core particles. Methylates SUPT5H. Mono- and dimethylates arginine residues of myelin basic protein (MBP) in vitro. Plays a role in the assembly of snRNP core particles. May play a role in cytokine-activated transduction pathways. Negatively regulates cyclin E1 promoter activity and cellular proliferation. May regulate the SUPT5H transcriptional elongation properties. May be part of a pathway that is connected to a chloride current, possibly through cytoskeletal rearrangement. Methylates histone H2A and H4 'Arg-3' during germ cell development. Methylates histone H3 'Arg-8', which may repress transcription. Methylates the Piwi proteins (PIWIL1, PIWIL2 and PIWIL4), methylation of Piwi proteins being required for the interaction with Tudor domain-containing proteins and subsequent localization to the meiotic nuage. Methylates RPS10.

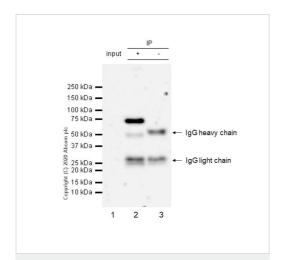
組織特異性 Ubiquitous.

配列類似性 Belongs to the protein arginine N-methyltransferase family.

翻訳後修飾 Disulfide bonds and non-covalent association mediate homooligomers formation.

細胞内局在 Cytoplasm. Nucleus.

画像



Immunoprecipitation - Anti-PRMT5 antibody [EPR5772] - BSA and Azide free (ab215364) This data was developed using <u>ab109451</u>, the same antibody clone in a different buffer formulation.

PRMT5 was immunoprecipitated from 0.35 mg Mouse brain tissue lysate 10 ug with <u>ab109451</u> at 1/30 dilution (2ug in 0.35mg lysates). Western blot was performed on the immunoprecipitate using <u>ab109451</u> at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP)(<u>ab131366</u>) was used at 1/5000 dilution.

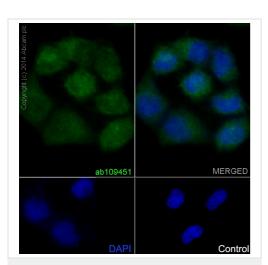
Lane 1: Mouse brain tissue lysate 10 ug

Lane 2: ab109451 IP in Mouse brain tissue lysate

Lane 3: Rabbit monoclonal $\lg G$ ($\underline{ab172730}$) instead of $\underline{ab109451}$ in mouse brain tissue lysate

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 100 seconds

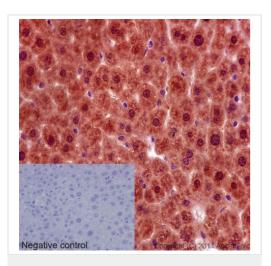


Immunocytochemistry/ Immunofluorescence - Anti-PRMT5 antibody [EPR5772] - BSA and Azide free (ab215364)

Immunocytochemistry/Immunofluorescence analysis of HeLa cells labelling PRMT5 (green) with purified <u>ab109451</u> at 1/50. Cells were fixed with 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. <u>ab150077</u>, an Alexa Fluor[®] 488-conjugated goat antirabbit IgG (1/200) was used as the secondary antibody. DAPI (blue) was used as the nuclear counterstain.

Control: primary antibody (1/50) and secondary antibody Alexa Fluor[®] 594-conjugated goat anti-mouse IgG (1/400).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab109451</u>).



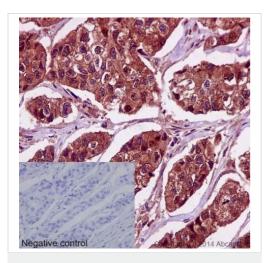
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-PRMT5 antibody

[EPR5772] - BSA and Azide free (ab215364)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse liver tissue sections labelling PRMT5 with purified ab109451 at 1/100. A prediluted HRP-polymer conjugated anti-rabbit lgG was used as the secondary antibody. Negative control using PBS instead of primary antibody. Counterstained with Hematoxylin.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab109451).

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



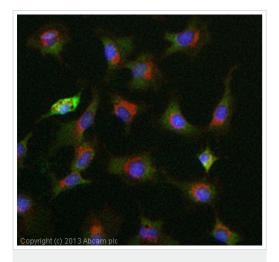
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-PRMT5 antibody

[EPR5772] - BSA and Azide free (ab215364)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human infiltrating duct carcinoma of breast tissue sections labelling PRMT5 with purified ab109451 at 1/100. A prediluted HRP-polymer conjugated anti-rabbit IgG was used as the secondary antibody. Negative control using PBS instead of primary antibody. Counterstained with Hematoxylin.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab109451).

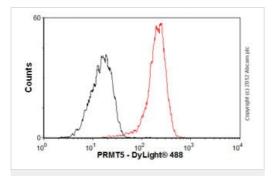
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-PRMT5 antibody [EPR5772] - BSA and Azide free (ab215364)

ICC/IF image of <u>ab109451</u> (unpurified) stained HepG2 cells. The cells were 100% methanol fixed (5 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (<u>ab109451</u>, 1/100 dilution) overnight at +4°C. The secondary antibody (green) was <u>ab96899</u>, DyLight® 488 goat antirabbit lgG (H+L) used at a 1/250 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.

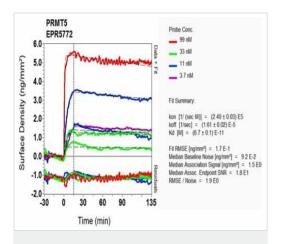
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab109451).



Flow Cytometry (Intracellular) - Anti-PRMT5 antibody [EPR5772] - BSA and Azide free (ab215364)

Overlay histogram showing HeLa cells stained with <u>ab109451</u> (unpurified, red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (<u>ab109451</u>, 1/100 dilution) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat antirabbit lgG (H+L) (<u>ab96899</u>) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit lgG (monclonal) (1µg/1x10⁶ cells) used under the same conditions. Acquisition of >5,000 events was performed.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab109451).



Ol-RD Scanning - Anti-PRMT5 antibody [EPR5772] - BSA and Azide free (ab215364)

Equilibrium disassociation constant (K_D)

Click here to learn more about K_D

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab109451).



Anti-PRMT5 antibody [EPR5772] - BSA and Azide free (ab215364)

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