abcam

Product datasheet

Anti-PRMT1 antibody [EPR18344] ab190892

リコンビナント RabMAb

4 References 画像数 11

製品の概要

製品名	Anti-PRMT1 antibody [EPR18344]
製品の詳細	Rabbit monoclonal [EPR18344] to PRMT1
由来種	Rabbit
アプリケーション	**適用あり:** IP, WB, IHC-P, ICC/IF
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: Caco2, HeLa, HEK-293 whole cell lysates. IHC-P: Human colon, Human breast cancer, rat colon and mouse liver tissue. ICC/IF: HeLa cells. ChIP: Chromatin prepared from MCF-7+ß-estraiol 30min, and MCF-7 cells.
特記事項	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**.

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
バッファー	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	EPR18344

アイソタイプ IgG

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ab190892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
IP		1/80.
WB		1/1000. Detects a band of approximately 42 kDa (predicted molecular weight: 42 kDa).
IHC-P		1/500. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
ICC/IF		1/2000.

ターゲット情報

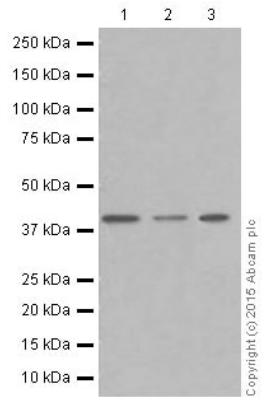
機能 Arginine methyltransferase that methylates (mono and asymmetric dimethylation) the guanidino nitrogens of arginyl residues present in proteins such as ESR1, histone H2, H3 and H4, PIAS1, HNRNPA1, HNRNPD, NFATC2IP, SUPT5H, TAF15 and EWS. Constitutes the main enzyme that mediates monomethylation and asymmetric dimethylation of histone H4 'Arg-4' (H4R3me1 and H4R3me2a, respectively), a specific tag for epigenetic transcriptional activation. Together with dimethylated PIAS1, represses STAT1 transcriptional activity, in the late phase of interferon gamma (IFN-gamma) signaling. May be involved in the regulation of TAF15 transcriptional activity, act as an activator of estrogen receptor (ER)-mediated transactivation, play a key role in neurite outgrowth and act as a negative regulator of megakaryocytic differentiation, by modulating p38 MAPK pathway.

組織特異性 Widely expressed.

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

細胞内局在 Nucleus. Cytoplasm > cytosol.

画像



Western blot - Anti-PRMT1 antibody [EPR18344] (ab190892)

All lanes : Anti-PRMT1 antibody [EPR18344] (ab190892) at 1/5000 dilution

Lane 1 : HeLa (Human epithelial cell line from cervix adenocarcinoma) cell lysate
Lane 2 : HEK-293 (Human epithelial cell line from embryonic kidney) cell lysate
Lane 3 : NIH/3T3 (Mouse embryonic fibroblast cell line) cell lysate

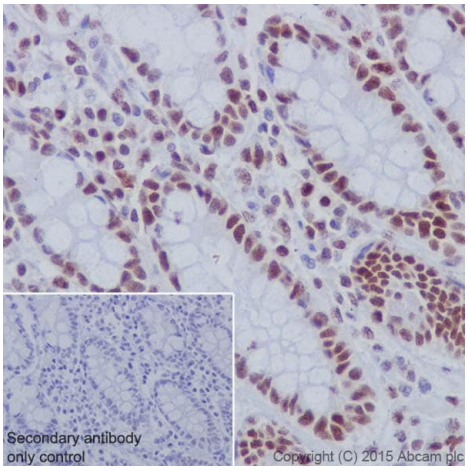
Lysates/proteins at 10 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 42 kDa
Observed band size: 42 kDa

Exposure time: 3 minutes

Blocking/Dilution buffer: 5% NFDM/TBST.

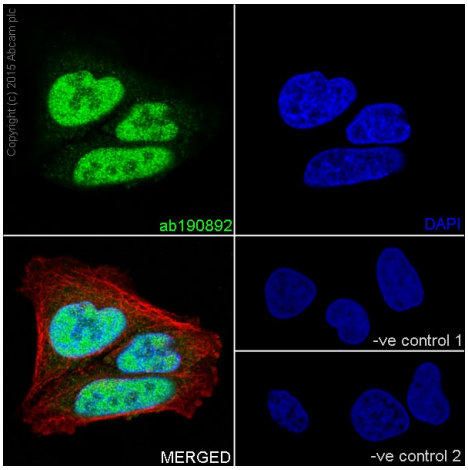


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PRMT1 antibody [EPR18344] (ab190892)

Immunohistochemical analysis of paraffin-embedded Human colon tissue labeling PRMT1 with ab190892 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution. Nuclear staining on Human colon tissue is observed. Counter stained with Hematoxylin.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution.



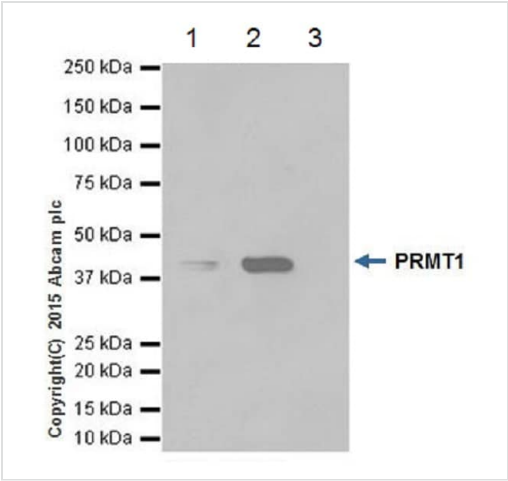
Immunocytochemistry/ Immunofluorescence - Anti-PRMT1 antibody [EPR18344] (ab190892)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HeLa (Human epithelial cell line from cervix adenocarcinoma) cells labeling PRMT1 with ab190892 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/500 dilution (green).

Confocal image showing nuclear staining on HeLa cell line. The nuclear counterstain is DAPI (blue).

Tubulin is detected with anti-alpha Tubulin mouse MAb (**ab7291**) at 1/1000 dilution, followed by Goat Anti-Mouse IgG H&L (Alexa Fluor® 594) (**ab150120**) secondary antibody at 1/500 dilution (red).

The negative controls are as follows:-
-ve control 1: ab190892 at 1/2000 dilution, followed by Goat Anti-Mouse IgG H&L (Alexa Fluor® 594) (**ab150120**) at 1/500 dilution.
-ve control 2: anti-alpha Tubulin mouse MAb (**ab7291**) at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) at 1/500 dilution.



Immunoprecipitation - Anti-PRMT1 antibody [EPR18344] (ab190892)

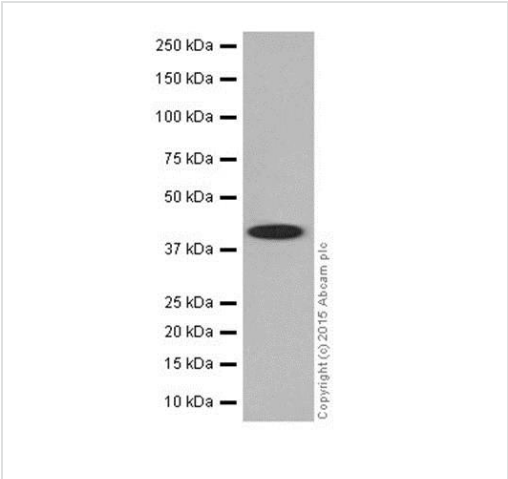
PRMT1 was immunoprecipitated from 1mg of HEK-293 (Human epithelial cell line from embryonic kidney) whole cell lysate with ab190892 at 1/80 dilution. Western blot was performed from the immunoprecipitate using ab190892 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (**ab131366**), was used for detection at 1/10000 dilution.

Lane 1: HEK-293 whole cell lysate 10ug (Input).

Lane 2: ab190892 IP in HEK-293 whole cell lysate.

Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of ab190892 in HEK293 whole cell lysate.

Blocking and dilution buffer and concentration: 5% NFDM/TBST
Exposure time: 30 seconds.



Western blot - Anti-PRMT1 antibody [EPR18344] (ab190892)

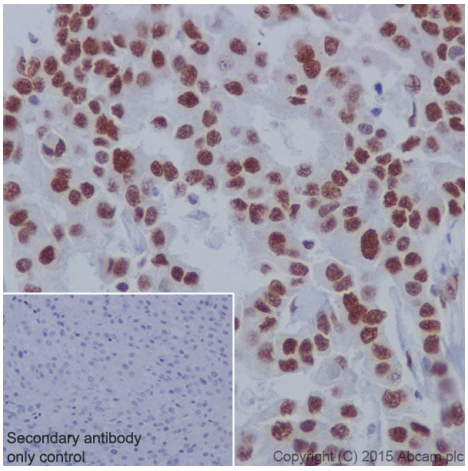
Anti-PRMT1 antibody [EPR18344] (ab190892) at 1/1000 dilution + A549 (Human lung carcinoma cell line) cell lysate at 10 µg

Secondary
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 42 kDa
Observed band size: 42 kDa

Exposure time: 3 minutes

Blocking/Dilution buffer: 5% NFDM/TBST.

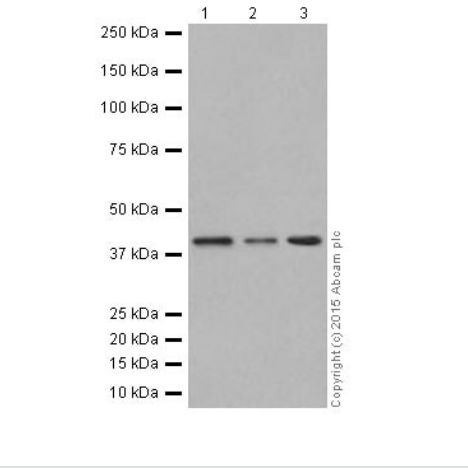


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PRMT1 antibody [EPR18344] (ab190892)

Immunohistochemical analysis of paraffin-embedded Human breast cancer tissue labeling PRMT1 with ab190892 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution. Nuclear and weak cytoplasmic staining on Human breast cancer tissue is observed. Counter stained with Hematoxylin.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution.



Western blot - Anti-PRMT1 antibody [EPR18344] (ab190892)

All lanes : Anti-PRMT1 antibody [EPR18344] (ab190892) at 1/1000 dilution

Lane 1 : C6 (Rat glial tumor cell line) cell lysate
Lane 2 : RAW264.7 (Mouse macrophage cell line transformed with Abelson murine leukemia virus) cell lysate
Lane 3 : PC-12 (Rat adrenal gland pheochromocytoma cell line) cell lysate

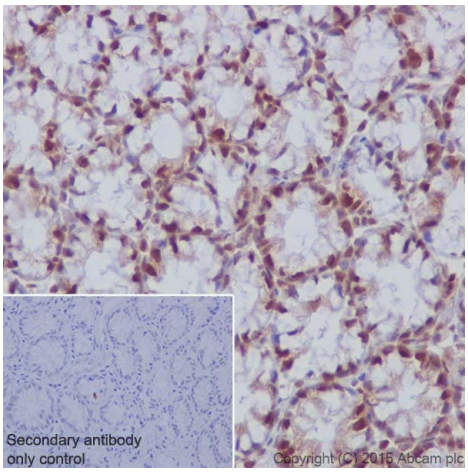
Lysates/proteins at 10 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 42 kDa
Observed band size: 42 kDa

Exposure time: 3 minutes

Blocking/Dilution buffer: 5% NFDM/TBST.

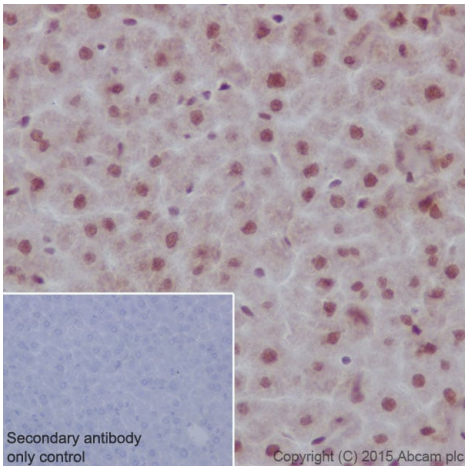


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PRMT1 antibody [EPR18344] (ab190892)

Immunohistochemical analysis of paraffin-embedded rat colon tissue labeling PRMT1 with ab190892 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution. Nuclear staining and weak cytoplasmic staining on rat colon tissue is observed. Counter stained with Hematoxylin.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution.



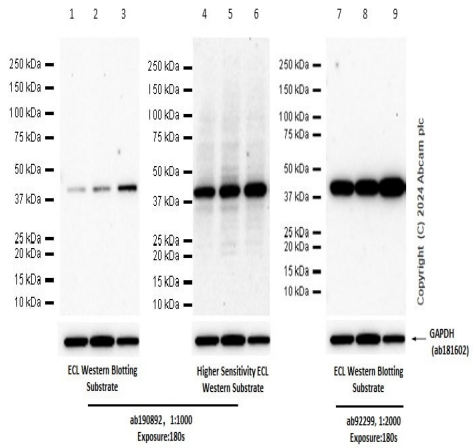
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PRMT1 antibody [EPR18344] (ab190892)

Immunohistochemical analysis of paraffin-embedded mouse liver tissue labeling PRMT1 with ab190892 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution. Nuclear and cytoplasmic staining on mouse liver tissue is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

It has been shown that in living cells PRMT1 shuttles between the nucleus and the cytoplasm depending on the methylation status of substrate proteins. Genes to Cells (2009) 14, 309–317.



Western blot - Anti-PRMT1 antibody [EPR18344] (ab190892)

Lanes 1-6 : Anti-PRMT1 antibody [EPR18344] (ab190892) at 1/1000 dilution
Lanes 7-9 : Anti-PRMT1 antibody [EPR3292] (**ab92299**) at 1/2000 dilution

Lanes 1 & 4 & 7 : Caco2 (Human colorectal adenocarcinoma epithelial cell) whole cell lysate
Lanes 2 & 5 : HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate
Lanes 3 & 6 & 9 : HEK-293 (Human embryonic kidney epithelial cell) whole cell lysate
Lane 8 : HeLa whole (Human cervix adenocarcinoma epithelial cell) cell lysate

Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

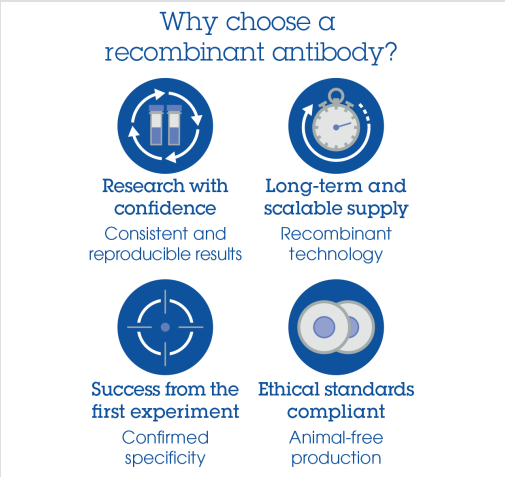
Predicted band size: 42 kDa
Observed band size: 42 kDa

Exposure time: 180 seconds

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

ab181602 was used as a GAPDH loading control.

We recommend using a higher sensitive ECL substrate to increase the band intensity. **ab92299** could be an alternative for getting stronger signal.



Anti-PRMT1 antibody [EPR18344] (ab190892)

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