abcam

Product datasheet

Anti-5-hydroxymethylcytosine (5-hmC) antibody [RM236] ab214728

リコンビナント

★★★★★ 1 Abreviews 21 References 画像数 8

製品の概要

製品名	Anti-5-hydroxymethylcytosine (5-hmC) antibody [RM236]
製品の詳細	Rabbit monoclonal [RM236] to 5-hydroxymethylcytosine (5-hmC)
由来種	Rabbit
特異性	ab214728 reacts to 5-hydroxymethylcytosine in both single-stranded and double-stranded DNA. No cross reactivity with non-methylated cytosine and methylcytosine in DNA.
アプリケーション	**適用あり:** ELISA, MeDIP, Flow Cyt, Dot blot, IHC-P, ICC/IF
種交差性	**交差種:** Species independent
免疫原	Chemical/ Small Molecule corresponding to 5-hydroxymethylcytosine (5-hmC) conjugated to Bovine Serum Albumin (BSA).
ポジティブ・コントロール	IHC-P: Human brain tissue. ICC/IF: HeLa cells.

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	Preservative: 0.09% Sodium azide Constituents: 50% Glycerol (glycerin, glycerine), 1% BSA, PBS
精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	RM236
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ab214728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。

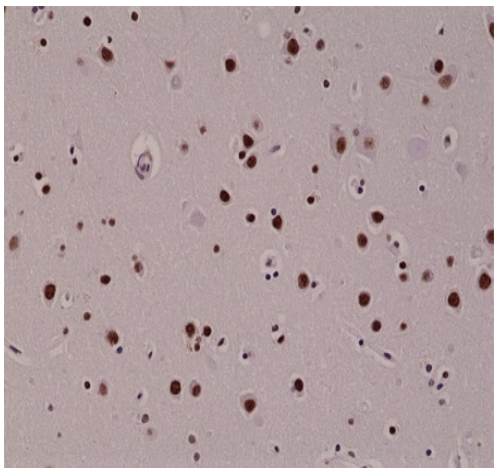
アプリケーション	Abreviews	特記事項
ELISA		Use a concentration of 0.1 - 1 µg/ml.
MeDIP		Use a concentration of 0.2 - 2 µg/ml.
Flow Cyt		Use a concentration of 1 - 5 µg/ml.
Dot blot		Use a concentration of 0.2 - 1 µg/ml.
IHC-P		Use a concentration of 0.1 - 1 µg/ml.
ICC/IF		Use a concentration of 0.5 - 2 µg/ml.

ターゲット情報

関連性

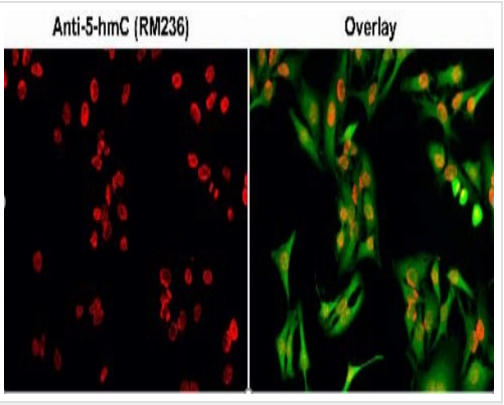
5-Hydroxymethylcytosine (5-hmC) is a modified base form of cytosine recently found in Human/mouse brain and inembryonic stem cells. This DNA pyrimidine nitrogen base can be generated by oxidation of 5-methylcytosine, a reaction mediated by the ten-eleven translocation (TET) family of the 5-mC hydroxylases. The function of this base is still not elucidated but it is believed to play an important role in switching genes on and off.

画像



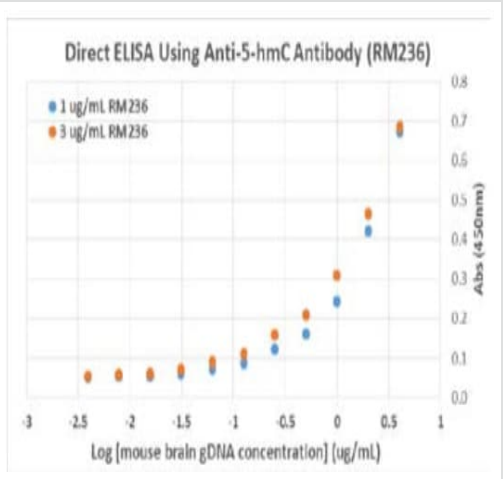
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-5-hydroxymethylcytosine (5-hmC) antibody [RM236] (ab214728)

Immunohistochemical analysis of paraffin-embedded human brain tissue labeling 5-hydroxymethylcytosine (5-hmC) with ab214728 at 1 µg/mL.



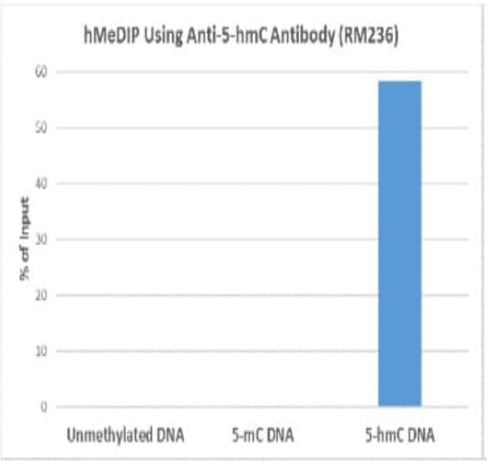
Immunocytochemistry/ Immunofluorescence - Anti-5-hydroxymethylcytosine (5-hmC) antibody [RM236] (ab214728)

Immunocytochemical staining of HeLa (Human epithelial cell line from cervix adenocarcinoma) cells using 0.5 µg/mL ab214728 (red). Actin filaments was labeled with fluorescein phalloidin (green). HeLa cells were fixed with 4% paraformaldehyde and permeabilized with methanol (−20 °C) before treatment with 2 N HCl for 30 minutes at 37°C to denature the DNA.



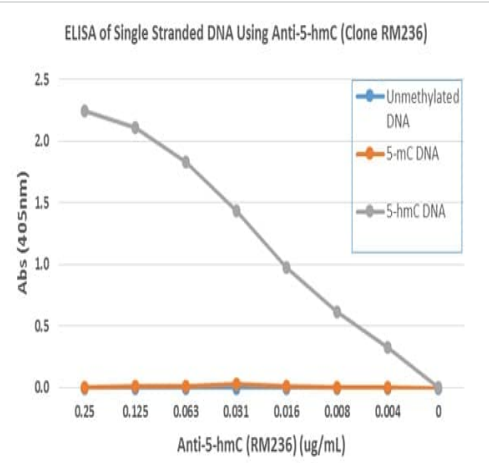
ELISA - Anti-5-hydroxymethylcytosine (5-hmC) antibody [RM236] (ab214728)

Direct ELISA of mouse brain genomic DNA using ab214728. The plate was directly coated with different concentrations of genomic DNA isolated from mouse brain tissue. 1 ug/mL or 3 ug/mL of ab214728 was used as the primary antibody and an HRP conjugated anti-rabbit IgG as the secondary antibody.



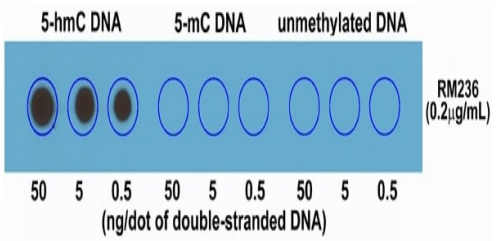
MeDIP - Anti-5-hydroxymethylcytosine (5-hmC) antibody [RM236] (ab214728)

hMeDIP was performed using anti-5-hmC antibody (RM236) at a 10:1 DNA:Ab ratio. 1 ng of unmethylated, 5-Methylcytosine (5-mC) or 5-Hydroxymethylcytosine (5-hmC) DNA standard (897 bp) was spiked in 1ug of genomic DNA isolated from HeLa cells as the control. Realtime PCR was then performed to determine the capture of DNA standard as in % of input.



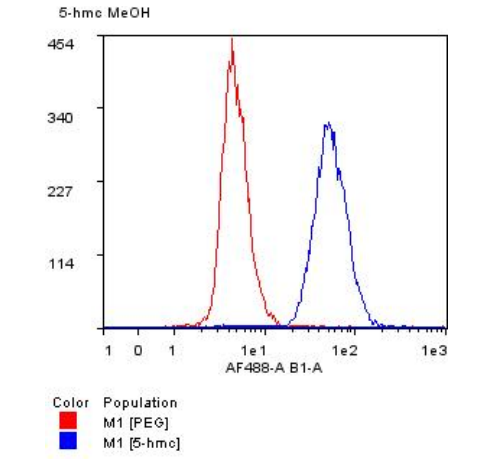
ELISA - Anti-5-hydroxymethylcytosine (5-hmC) antibody [RM236] (ab214728)

ELISA of single stranded DNA using ab214728 in a serial dilution. The plate was coated with streptavidin and then biotinylated single stranded unmethylated DNA, 5-Methylcytosine (5-mC) DNA, and 5-Hydroxymethylcytosine (5-hmC) DNA. Secondary antibody: alkaline phosphatase conjugated anti-rabbit IgG.



Dot Blot - Anti-5-hydroxymethylcytosine (5-hmC) antibody [RM236] (ab214728)

Dot blot of double stranded DNA using ab214728 at 0.2 µg/mL. The membrane was pre-spotted with 50, 5, and 0.5 ng/dot of double stranded 5-Hydroxymethylcytosine (5-hmC) DNA, 5-Methylcytosine (5-mC) DNA, and unmethylated DNA. The pre-spotted membrane was then blotted with ab214728.



Flow Cytometry - Anti-5-hydroxymethylcytosine (5-hmC) antibody [RM236] (ab214728)

Flow Cytometry analysis of 5-hmC expression in HEK293 cells using ab214728. The cells were fixed with ice-cold MeOH, permeabilized with 0.5% Triton X-100, denatured with 2N HCl, then stained with ab214728 (Blue) or with a negative control antibody (Red).

Anti-5-hydroxymethylcytosine (5-hmC) antibody [RM236] (ab214728)

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