

Anti-MBD2 + MBD3 antibody [106B691] ab45027

★★★★★ [1 Abreviews](#) [10 References](#) [画像数 4](#)

製品の概要

製品名	Anti-MBD2 + MBD3 antibody [106B691]
製品の詳細	Mouse monoclonal [106B691] to MBD2 + MBD3
由来種	Mouse
アプリケーション	適用あり: IHC-P, Flow Cyt (Intra), ICC/IF, WB
種交差性	交差種: Human 交差が予測される動物種: Mouse, Rat, Chicken, Xenopus laevis, Zebrafish 
免疫原	Synthetic peptide corresponding to Human MBD2 + MBD3 aa 200-300. Synthetic peptide: CKAFMVTDEDIRKQEE , corresponding to amino acids 215-230 of Human MBD3 Database link: Q9UBB5 <div>  Run BLAST with  Run BLAST with </div>
ポジティブ・コントロール	HeLa cells (nuclear fraction). IHC-P: Human placenta tissue Flow Cyt (Intra): HeLa cells.
特記事項	<p>The theoretical molecular weight of human MBD2 (411 amino acids) is 45 kD and human MBD3 (291 amino acids) is 33 kD.</p> <p>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.</p> <p>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</p>

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 or -80°C. Avoid freeze / thaw cycle.
バッファー	pH: 7.4 Preservative: 0.02% Sodium azide Constituent: PBS
精製度	Protein G purified

一次抗体 備考	The theoretical molecular weight of human MBD2 (411 amino acids) is 45 kD and human MBD3 (291 amino acids) is 33 kD.
ポリ/モノ	モノクローナル
クローン名	106B691
アイソタイプ	IgG1
軽鎖の種類	kappa

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ab45027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確認ください。

アプリケーション	Abreviews	特記事項
IHC-P		1/300.
Flow Cyt (Intra)		Use 1µg for 10 ⁶ cells. ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.
ICC/IF		Use at an assay dependent concentration.
WB	★★★★★ (1)	Use a concentration of 2 µg/ml. Predicted molecular weight: 33, 45 kDa.

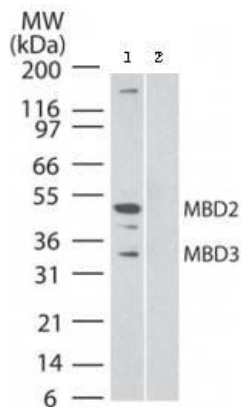
ターゲット情報

関連性

DNA methylation, or the addition of methyl groups to cytosine bases in the dinucleotide CpG, is imperative to proper development and regulates gene expression. The methylation pattern involves the enzymatic processes of methylation and demethylation. The demethylation enzyme was recently found to be a mammalian protein, which exhibits demethylase activity associated to a methyl-CpG-binding domain (MBD). The enzyme is able to revert methylated cytosine bases to cytosines within the particular dinucleotide sequence mCpG by catalyzing the cleaving of the methyl group as methanol. MeCP2 and MBD1 (PCM1) are first found to repress transcription by binding specifically to methylated DNA. MBD2 and MBD4 (also known as MED1) were later found to colocalize with foci of heavily methylated satellite DNA and believed to mediate the biological functions of the methylation signal. Surprisingly, MBD3 does not bind methylated DNA both in vivo and in vitro. MBD1, MBD2, MBD3, and MBD4 are found to be expressed in somatic tissues, but the expression of MBD1 and MBD2 is reduced or absent in embryonic stem cells, which are known to be deficient in MeCP1 activity. MBD4 have homology to bacterial base excision repair DNA N-glycosylases/lyases. In some microsatellite unstable tumors MBD4 is mutated at an exonic polynucleotide tract.

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画像



Western blot - Anti-MBD2 + MBD3 antibody
[106B691] (ab45027)

All lanes : Anti-MBD2 + MBD3 antibody [106B691] (ab45027) at 2 µg/ml

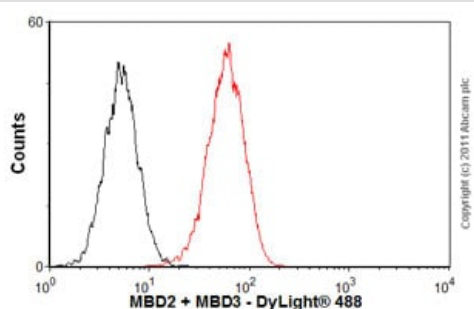
Lane 1 : HeLa cell lysate (nuclear fraction) without immunising peptide

Lane 2 : HeLa cell lysate (nuclear fraction) with immunising peptide

Predicted band size: 33, 45 kDa

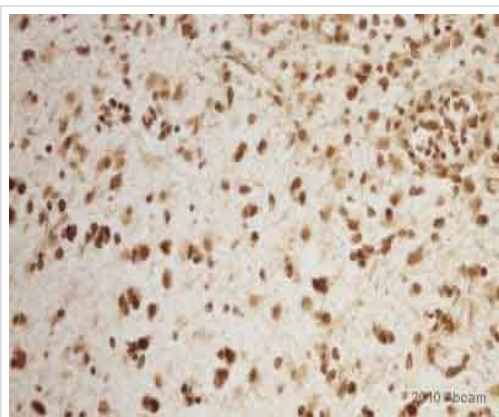
Observed band size: 33,45 kDa

Additional bands at: 160 kDa, 40 kDa. We are unsure as to the identity of these extra bands.



Flow Cytometry (Intracellular) - Anti-MBD2 + MBD3
antibody [106B691] (ab45027)

Overlay histogram showing HeLa cells stained with ab45027 (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. The cells were then incubated with the antibody (ab45027, 1 µg/1x10⁶ cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) ([ab96879](#)) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] ([ab91353](#), 2 µg/1x10⁶ cells) used under the same conditions. Acquisition of >5,000 events was performed.

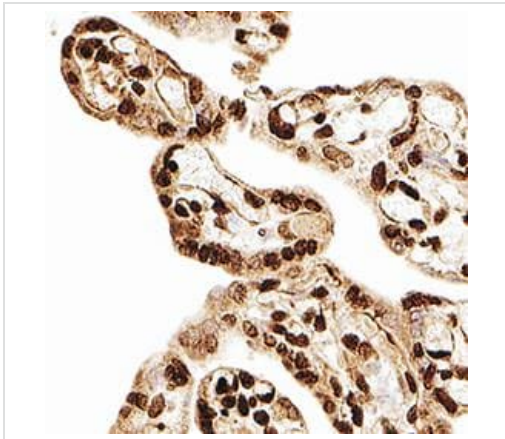


Immunohistochemistry (Formalin/PFA-fixed paraffin-
embedded sections) - Anti-MBD2 + MBD3 antibody
[106B691] (ab45027)

Image courtesy of an anonymous Abreview.

ab45027 at 2 µg/ml staining MBD2 + MBD3 in human glioma tissue by Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections).

Tissue was fixed in paraformaldehyde and a heat mediated antigen retrieval step was performed and samples were blocked using 10% BSA. The secondary used was an HRP conjugated anti rabbit/mouse mix.



Immunohistochemistry analysis of immersion fixed paraffin-embedded sections of human placenta labeling MBD2 + MBD3 with ab45027 at 1/300 for 1 hour at room temperature followed by incubation with the Anti-Mouse IgG VisUCyte™ HRP Polymer Antibody. Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue).

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MBD2 + MBD3 antibody [106B691] (ab45027)

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