


Anti-MBD2 + MBD3 antibody [106B691] ab45027

★★★★★ [1 Abreviews](#) [10 References](#) [4 图像](#)

概述

产品名称	Anti-MBD2 + MBD3抗体[106B691]
描述	小鼠单克隆抗体[106B691] to MBD2 + MBD3
宿主	Mouse
经测试应用	适用于: IHC-P, Flow Cyt (Intra), ICC/IF, WB
种属反应性	与反应: Human 预测可用于: 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  Run BLAST with  Run BLAST with
阳性对照	HeLa cells (nuclear fraction). IHC-P: Human placenta tissue Flow Cyt (Intra): HeLa cells.
常规说明	The theoretical molecular weight of human MBD2 (411 amino acids) is 45 kD and human MBD3 (291 amino acids) is 33 kD. 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. 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

性能

形式	Liquid
存放说明	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.
存储溶液	pH: 7.4 Preservative: 0.02% Sodium azide Constituent: PBS
纯度	Protein G purified

Primary antibody说明

The theoretical molecular weight of human MBD2 (411 amino acids) is 45 kD and human MBD3 (291 amino acids) is 33 kD.

克隆 单克隆

克隆编号 106B691

同种型 IgG1

轻链类型 kappa

应用

The Abpromise guarantee

Abpromise™ 承诺保证使用ab45027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
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.

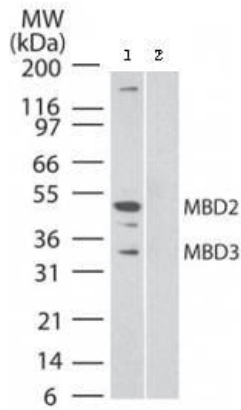
靶标

相关性

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 mdCpdG 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.

细胞定位 Nuclear

图片



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

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

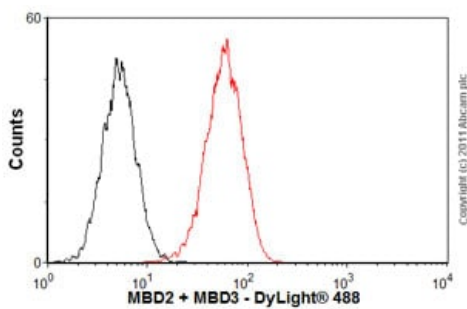
Lane 1 : HeLa cell lysate (nuclear fraction) without immunising peptide

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

Predicted band size: 33, 45 kDa

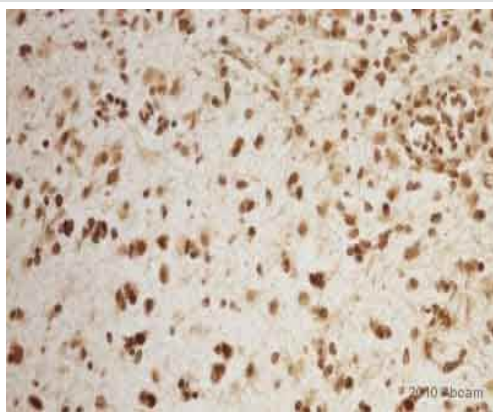
Observed band size: 33,45 kDa

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.

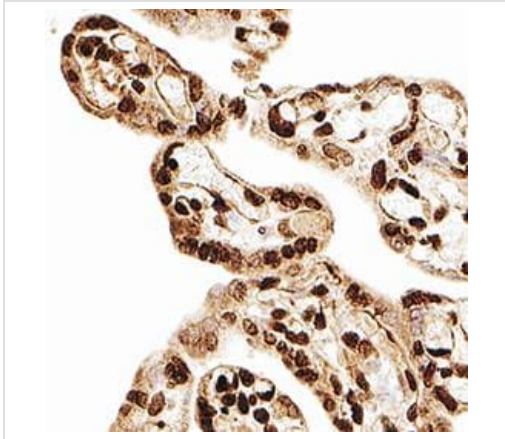


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MBD2 + MBD3 antibody [106B691] (ab45027)

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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