

Anti-MBD1 antibody [EPR3564] ab108510

敲除验证
重组
RabMAb

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概述

产品名称	Anti-MBD1抗体[EPR3564]
描述	兔单克隆抗体[EPR3564] to MBD1
宿主	Rabbit
经测试应用	适用于: WB, IHC-P, ICC/IF 不适用于: Flow Cyt
种属反应性	与反应: Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
阳性对照	WB: HeLa, A431, 293T and Jurkat whole cell lysate (ab7899). IHC-P: Human tonsil tissue. ICC: MCF7 cells.
常规说明	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p> <p>Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.</p>

性能

形式	Liquid
存放说明	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
存储溶液	pH: 7.20 Preservative: 0.05% Sodium azide Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue culture supernatant
纯度	Tissue culture supernatant

克隆	单克隆
克隆编号	EPR3564
同种型	IgG

应用

The Abpromise guarantee

Abpromise™承诺保证使用ab108510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。

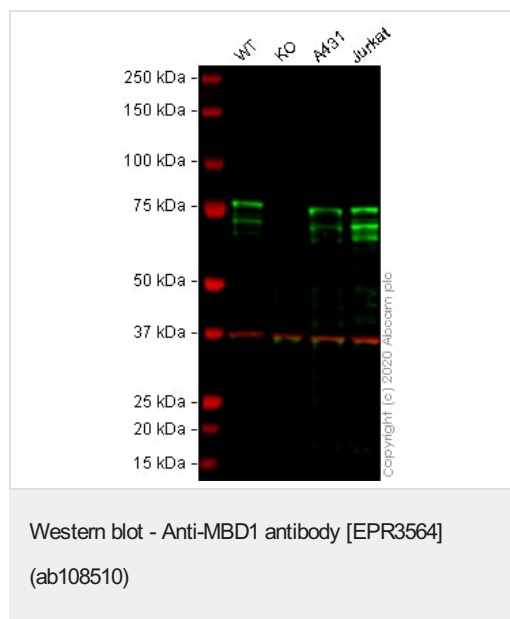
应用	Ab评论	说明
WB		1/500 - 1/1000. Detects a band of approximately 80 kDa (predicted molecular weight: 67 kDa).
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. Antigen retrieval is recommended.
ICC/IF		1/100 - 1/250.

应用说明

Is unsuitable for Flow Cyt.

靶标

功能	Transcriptional repressor that binds CpG islands in promoters where the DNA is methylated at position 5 of cytosine within CpG dinucleotides. Binding is abolished by the presence of 7-mG that is produced by DNA damage by methylmethanesulfonate (MMS). Acts as transcriptional repressor and plays a role in gene silencing by recruiting AFT7IP, which in turn recruits factors such as the histone methyltransferase SETDB1. Probably forms a complex with SETDB1 and ATF7IP that represses transcription and couples DNA methylation and histone 'Lys-9' trimethylation. Isoform 1 and isoform 2 can also repress transcription from unmethylated promoters.
组织特异性	Widely expressed.
序列相似性	Contains 3 CXXC-type zinc fingers. Contains 1 MBD (methyl-CpG-binding) domain.
结构域	The methyl-CpG-binding domain (MBD) functions both in binding to methylated DNA and in protein interactions. The third CXXC-type zinc finger mediates binding to non-methylated CpG dinucleotides. The transcriptional repression domain (TRD) is involved in transcription repression and in protein interactions.
翻译后修饰	Sumoylated with SUMO1 by PIAS1 and PIAS3. Sumoylation affects transcriptional silencing by preventing the interaction with SETDB1. In contrast, sumoylation may increase interaction with AFT7IP. Phosphorylated upon DNA damage, probably by ATM or ATR.
细胞定位	Nucleus speckle. Chromosome. Nuclear, in a punctate pattern. Associated with euchromatic regions of the chromosomes, with pericentromeric regions on chromosome 1 and with telomeric regions from several chromosomes.



All lanes : Anti-MBD1 antibody [EPR3564] (ab108510) at 1/500 dilution

Lane 1 : Wild-type HAP1 cell lysate

Lane 2 : MBD1 knockout HAP1 cell lysate

Lane 3 : A431 cell lysate

Lane 4 : Jurkat cell lysate

Lysates/proteins at 40 µg per lane.

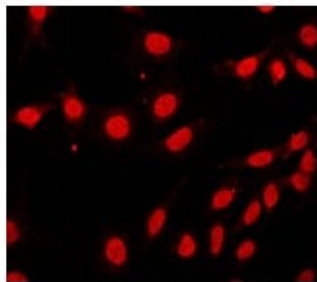
Performed under reducing conditions.

Predicted band size: 67 kDa

Observed band size: 70-80 kDa

Lanes 1 -4: Merged signal (red and green). Green - ab108510 observed at 70-80 kDa. Red - loading control [ab8245](#) (Mouse anti-GAPDH antibody [6C5]) observed at 37kDa.

ab108510 was shown to react with MBD1 in wild-type HAP1 cells in western blot with loss of signal observed in MBD1 knockout sample. Wild-type and MBD1 knockout HAP1 cell lysates were subjected to SDS-PAGE. Membranes were blocked in 3% milk in TBS-T (0.1% Tween®) before incubation with ab108510 and [ab8245](#) (Mouse anti-GAPDH antibody [6C5]) overnight at 4°C at a 1 in 500 Dilution and a 1 in 20000 dilution respectively. Blots were incubated with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed ([ab216773](#)) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed ([ab216776](#)) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Immunocytochemistry/ Immunofluorescence - Anti-MBD1 antibody [EPR3564] (ab108510)

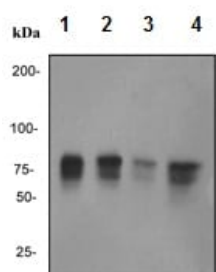
ab108510, at 1/100 dilution, staining MBD1 in MCF7 cells by Immunofluorescence.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MBD1 antibody [EPR3564] (ab108510)

ab108510, at 1/100 dilution, staining MBD1 in paraffin-embedded Human tonsil tissue by Immunohistochemistry.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Western blot - Anti-MBD1 antibody [EPR3564] (ab108510)

All lanes : Anti-MBD1 antibody [EPR3564] (ab108510) at 1/500 dilution

Lane 1 : HeLa cell lysate

Lane 2 : A431 cell lysate

Lane 3 : 293T (Human embryonic kidney epithelial cell) cell lysate

Lane 4 : Jurkat cell lysate

Lysates/proteins at 10 µg per lane.

Predicted band size: 67 kDa

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-MBD1 antibody [EPR3564] (ab108510)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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