

**MBD1 polyclonal antibody**  
**Rabbit Polyclonal Antibody**  
**Catalog # ABV11363****Specification**

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**MBD1 polyclonal antibody - Product Information**

Application	WB, E
Primary Accession	<a href="#">O9UIS9</a>
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	66607

**MBD1 polyclonal antibody - Additional Information****Gene ID** 4152

Positive Control	Western blot: Hela cells, ELISA: peptides, ChIP: U2OS cells.
Application & Usage	ChIP: 1.5 µg/ChIP, WB: 1:500, ELISA: 1:1000.

**Other Names**

CXXC3, PCM1, RFT, Methyl-CpG-Binding Domain 1

**Target/Specificity**

MBD1

**Antibody Form**

Liquid

**Appearance**

Colorless liquid

**Formulation**

In PBS with 0.05% sodium azide and 0.05% ProClin 300.

**Handling**

The antibody solution should be gently mixed before use.

**Reconstitution & Storage**

-20 °C

**Background Descriptions****Precautions**

MBD1 polyclonal antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## **MBD1 polyclonal antibody - Protein Information**

**Name** MBD1 ([HGNC:6916](#))

**Synonyms** CXXC3, PCM1

### **Function**

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 ATF7IP, 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.

### **Cellular Location**

Nucleus. Nucleus matrix. Nucleus speckle Chromosome Note=Nuclear, in a punctate pattern (PubMed:12711603). Associated with euchromatic regions of the chromosomes, with pericentromeric regions on chromosome 1 and with telomeric regions from several chromosomes (PubMed:10648624, PubMed:10454587).

### **Tissue Location**

Widely expressed..

## **MBD1 polyclonal antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## **MBD1 polyclonal antibody - Images**

## **MBD1 polyclonal antibody - Background**

MBD1 is a transcriptional repressor that specifically binds to methylated CpG dinucleotides in promoter sequences. MBD1 acts by recruiting a variety of histone deacetylases (HDAC's) and chromatin remodelling factors. MBD1-dependent transcriptional repression is mediated by ATF7IP through the recruitment of factors such as the histone methyltransferase SETDB1. MBD1 probably forms a complex with SETDB1 and ATF7IP which couples DNA methylation to H3K9 trimethylation and represses transcription.