

# MBD1 Antibody

Rabbit mAb Catalog # AP91371

# **Product Information**

Application	WB, IHC, IF, ICC, IP, IHF
Primary Accession	<u>Q9UIS9</u>
Reactivity	Human
Clonality	Monoclonal
Other Names	CXXC 3; Mbd1; MECP1 COMPLEX; PCM1; RFT;
lsotype	Rabbit IgG
Host	Rabbit
Calculated MW	66607

## **Additional Information**

Dilution Purification Immunogen	WB 1:500~1:1000 IHC 1:50~1:200 ICC/IF 1:50~1:200 IP 1:20 Affinity-chromatography A synthesized peptide derived from human MBD1
Description	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).
Storage Condition and Buffer	

#### **Protein Information**

Name Synonyms	MBD1 ( <u>HGNC:6916</u> ) 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:10454587, PubMed:10648624).

#### **Tissue Location**

Widely expressed..

### Images



Western blot analysis of MBD1 expression in HeLa cell lysate.

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