

MBD1 Antibody
Rabbit Polyclonal Antibody
Catalog # ABV10221**Specification**

MBD1 Antibody - Product Information

Application	WB
Primary Accession	O9UIS9
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	66607

MBD1 Antibody - Additional Information**Gene ID** 4152**Application & Usage****Western blot analysis (0.5-4 µg/ml).**
However, the optimal conditions should be determined individually. Cross activity to perforin of other species has not been determined.**Other Names**

CXXC-type zinc finger protein 3, Methyl-CpG-binding protein MBD1, Protein containing methyl-CpG-binding domain 1

Target/Specificity

MBD1

Antibody Form

Liquid

Appearance

Colorless liquid

Formulation

100 µg (0.5 mg/ml) affinity purified rabbit anti- MBD1 polyclonal antibody in phosphate buffered saline (PBS), pH 7.2, containing 30% glycerol, 0.5% BSA, 5 mM EDTA and 0.01% thimerosal.

Handling

The antibody solution should be gently mixed before use.

Reconstitution & Storage

-20 °C

Background Descriptions**Precautions**

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

MBD1 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

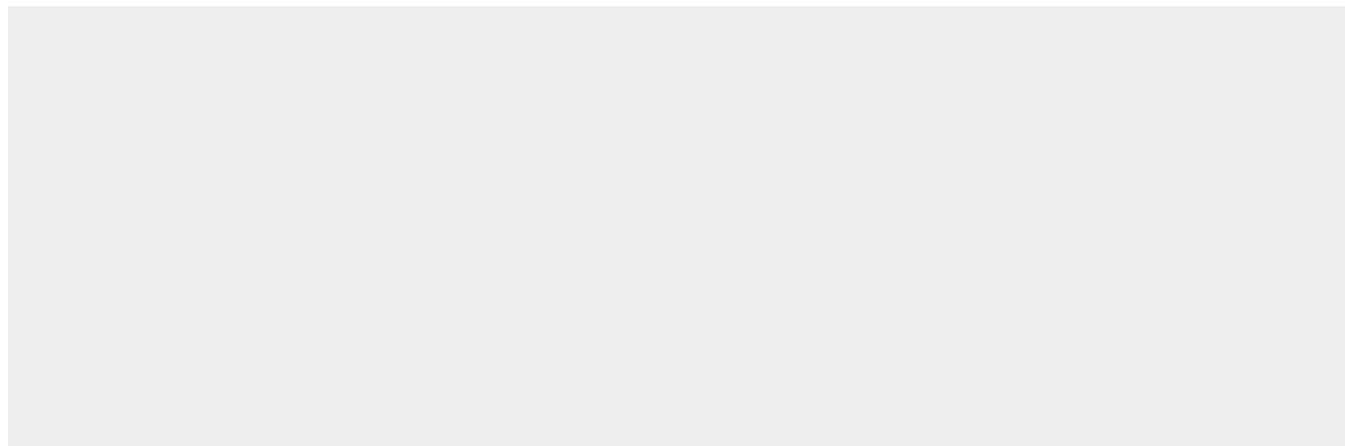
Widely expressed..

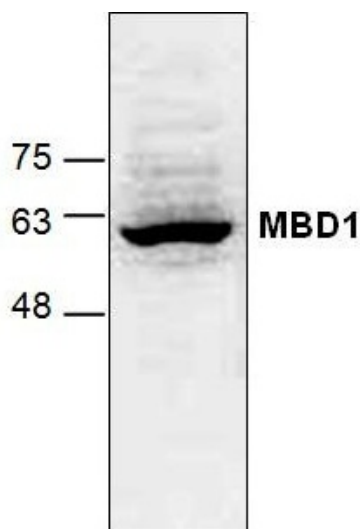
MBD1 Antibody - Protocols

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 Antibody - Images





Western blot analysis of MBD1 using Jurkat cell lysate.

MBD1 Antibody - Background

The MBD family of proteins includes MeCP2, MBD1, MBD2, MBD3 and MBD4. MBD1 (methyl-CpG binding domain protein 1) binds to methylated CpG sites and represses gene transcription. MBD1 is recruited to both methylated and non-methylated CpGs by separate domains: the CXXC domain targets the protein to non-methylated CpGs whereas the MBD domain targets the protein to methylated CpG. MBD1 may also interact with histone methyltransferase SETDB1 to repress transcription.