

Rabbit MBD1 Polyclonal Antibody | anti-MBD1 antibody

MBD1 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA327370	Rabbit	Human, Mouse, Rat	ELISA, Immunocytochemistry, Immunofluorescence, Western Blot

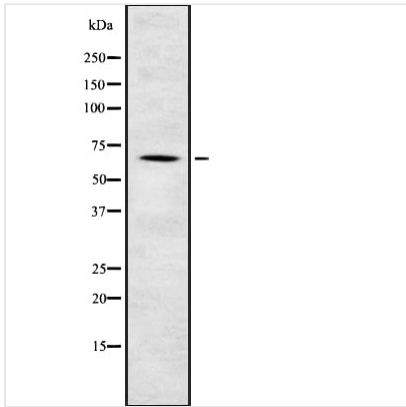
PRODUCT SYNONYMS

MBD1; Polyclonal Antibody; MBD1 Antibody; CXXC 3; CXXC-type zinc finger protein 3; CXXC3; MBD 1; Mbd1; MBD1_HUMAN; MECP1 COMPLEX; Methyl CpG binding domain protein 1; Methyl CpG binding domain protein 1 isoform PCM1; Methyl CpG binding protein MBD1; Methyl CpG binding protein splice variant 1; Methyl CpG binding protein splice variant 2; Methyl CpG binding protein splice variant 3; Methyl CpG binding protein splice variant 4; Methyl-CpG-binding domain protein 1; Methyl-CpG-binding protein MBD1; PCM 1; PCM1; Protein containing methyl-CpG-binding domain 1; Regulator of fibroblast growth factor 2 (FGF 2) transcription; RFT; The regulator of fibroblast growth factor 2(FGF 2) transcription; anti-MBD1 antibody

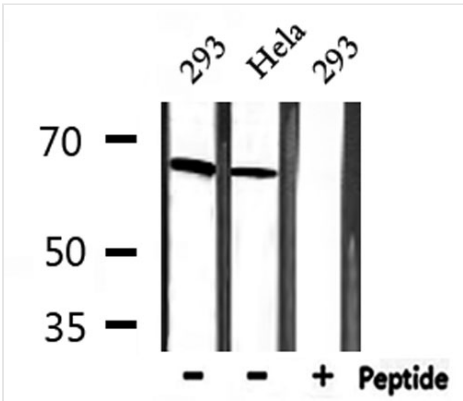
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	MBD1 antibody detects endogenous levels of total MBD1
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	655
Applicable Applications for anti-MBD1 antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), WB (Western Blot)
Immunogen	A synthesized peptide derived from human MBD1
Subcellular Location	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.
Tissue Specificity	Widely expressed.
Predicted Cross Reactivity	Pig, Horse, Sheep, Rabbit, Dog
Similarity	Pig (100%), Horse (100%), Sheep (90%), Rabbit (90%), Dog (100%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

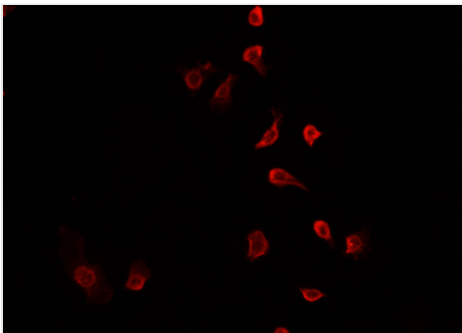
IMAGES



WB (Western Blot)
Western blot analysis of MBD1 using Jurkat whole lysates.



WB (Western Blot)
Western blot analysis of extracts from 293 and HeLa, using MBD1 Antibody.



IF (Immunofluorescence)
AAA327370 staining HepG2 cells by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) antibody, diluted at 1/600, was used as secondary antibody.

ADDITIONAL INFORMATION

Related Product Information for anti-MBD1 antibody

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 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.

Subunit Structure: Interacts with the Ten-1 ICD form of TENM1 (By similarity). Interacts with OASL, AFT7IP, AFT7IP2 and BAHD1. Binds CHAF1A and the SUV39H1-CBX5 complex via the MBD domain. Binds MGP via the TRD domain. May be part of the MeCP1 complex. During DNA replication, it recruits SETDB1 to form a S phase-specific complex that facilitates methylation of H3 'Lys-9' during replication-coupled chromatin assembly and is at least composed of the CAF-1 subunit CHAF1A, MBD1 and SETDB1.

Post-translational Modifications: 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.

Similarity: 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.

NCBI AND UNIPROT INFORMATION

NCBI GI #	323462147
NCBI GeneID	4152
NCBI Accession #	NP_001191065.1

NCBI GenBank Nucleotide #	NM_001204136.1
UniProt Accession #	Q9UIS9 ; O15248 ; O95241 ; Q7Z7B5 ; Q8N4W4 ; Q9UNZ6 ; A4UTZ0 ; B4DXJ5 ; E9PEC5 ; K7ELI2 ; K7EQZ4 ; K7ESN0
Molecular Weight	Observed: 67 kDa Predicted: 67 kDa
NCBI Official Full Name	methyl-CpG-binding domain protein 1 isoform 6
NCBI Official Synonym Full Names	methyl-CpG binding domain protein 1
NCBI Official Symbol	MBD1
NCBI Official Synonym Symbols	RFT; PCM1; CXXC3
NCBI Protein Information	methyl-CpG-binding domain protein 1
UniProt Protein Name	Methyl-CpG-binding domain protein 1
UniProt Gene Name	MBD1
UniProt Synonym Gene Names	CXXC3; PCM1

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/mbd1-antibody-immunocytochemistry-immunofluorescence-western-blot-elisa/327370>