10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

KD-Validated Anti-Methyl-CpG Binding Domain Protein 1 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI1605

Specification

KD-Validated Anti-Methyl-CpG Binding Domain Protein 1 Rabbit Monoclonal Antibody - Product Information

Application	**WB, FC**
Primary Accession	Q9UIS9
Reactivity	**Rat, Human**
Clonality	**Monoclonal**
Isotype	**Rabbit IgG**
Calculated MW	**Predicted, 67 kDa , o bserved , 70-80 kDa KDa**
Gene Name	**MBD1**
Aliases	**MBD1; Methyl-CpG Binding Domain Protein 1; CXXC3; PCM1; Protein Containing Methyl-CpG-Binding Domain 1; Methyl-CpG-Binding Domain Protein 1; CXXC-Type Zinc Finger Protein 3; Protein Containing MBD 1; The Regulator Of Fibroblast Growth Factor 2 (FGF-2) Transcription; Methyl-CpG-Binding Protein MBD1; RFT**
Immunogen	**A synthesized peptide derived from human MBD1**

KD-Validated Anti-Methyl-CpG Binding Domain Protein 1 Rabbit Monoclonal Antibody - Additional Information

Gene ID **4152**

Other Names
Methyl-CpG-binding domain protein 1, CXXC-type zinc finger protein 3, Methyl-CpG-binding protein MBD1, Protein containing methyl-CpG-binding domain 1, MBD1 (HGNC:6916), CXXC3, PCM1

KD-Validated Anti-Methyl-CpG Binding Domain Protein 1 Rabbit Monoclonal 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:10454587, PubMed:10648624).

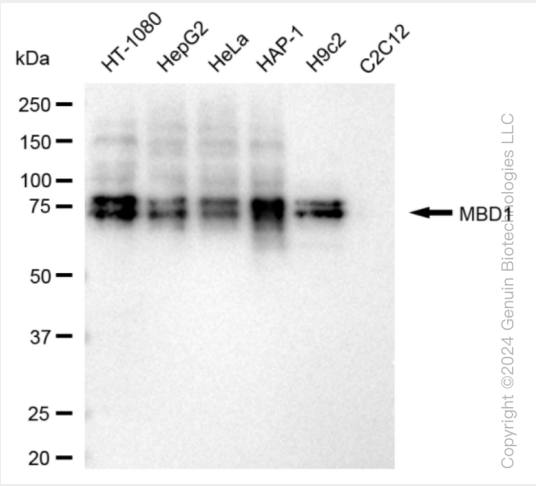
Tissue Location
Widely expressed..

KD-Validated Anti-Methyl-CpG Binding Domain Protein 1 Rabbit Monoclonal Antibody - Protocols

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

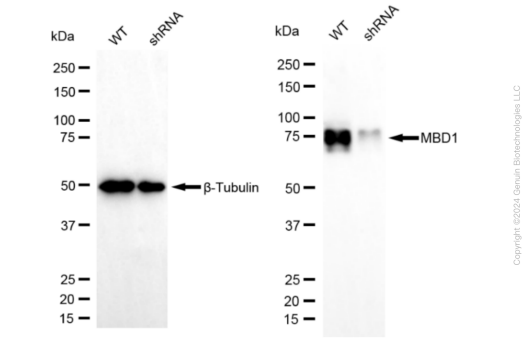
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KD-Validated Anti-Methyl-CpG Binding Domain Protein 1 Rabbit Monoclonal Antibody - Images

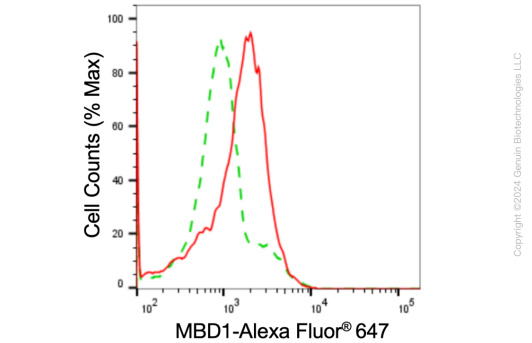


Western blotting analysis using anti-MBD1 antibody (Cat#AGI1605). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-MBD1 antibody (Cat#AGI1605, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999



Western blotting analysis using anti-MBD1 antibody (Cat#AGI1605). MBD1 expression in wild type (WT) and MBD1 shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-MBD1 antibody (Cat#AGI1605, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of MBD1 expression in HAP-1 cells using anti-MBD1 antibody (Cat#AGI1605, 1:2,000). Green, isotype control; red, MBD1.