

Product Name: KD-Validated Methyl-CpG Binding Domain Protein 1 Recombinant Rabbit Monoclonal Antibody

Catalog #: KVA00995

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC
Reactivity	Human,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000
Molecular Weight	Calculated MW: 66.6kDa

Antigen Information

Gene Name	MBD1
Alternative Names	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
Gene ID	4152.0
SwissProt ID	Q9UIS9
Immunogen	A synthesized peptide derived from human MBD1

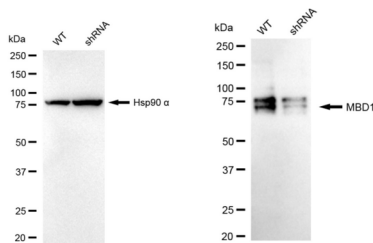
Background

The protein encoded by this gene is a member of a family of nuclear proteins related by the presence of a methyl-CpG binding domain (MBD). These proteins are capable of binding specifically to methylated DNA, and some members can also repress transcription from methylated gene promoters. This protein contains multiple domains: MBD at the N-terminus that functions both in binding to methylated DNA and in protein interactions; several CXXC-type zinc finger domains that mediate binding to non-methylated CpG dinucleotides; transcriptional repression domain (TRD) at the C-terminus that is involved in transcription repression and in protein interactions. Numerous alternatively spliced transcript variants encoding different isoforms have been noted for this gene.[provided by RefSeq, Feb 2011]

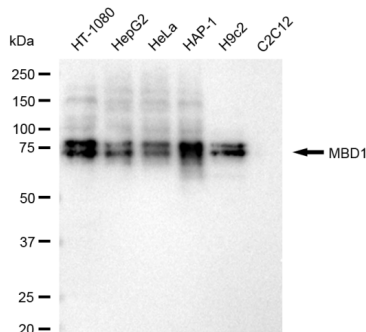
Research Area

Epigenetics and Nuclear Signaling

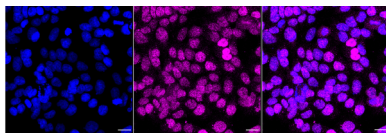
Image Data



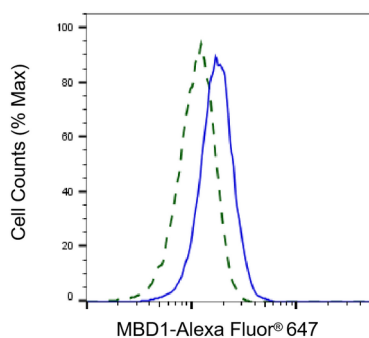
Western blotting analysis using MBD1 antibody (KVA00995). MBD1 expression in wild type (WT) and MBD1 shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with MBD1 antibody (KVA00995, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



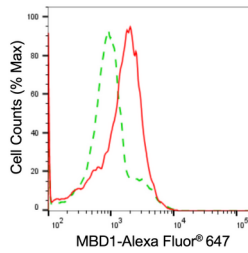
Western blotting analysis using MBD1 antibody (KVA00995). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with MBD1 antibody (KVA00995, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunocytochemical staining of HAP-1 cells with MBD1 antibody (KVA00995, 1:1,000). Nuclei were stained blue with DAPI; MBD1 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser intensity and smart gain: Low. Scale bar, 20 µm.



Validation of MBD1 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with MBD1 antibody (KVA00995, 1:2,000) and analyzed using BD flow cytometer.



Flow cytometric analysis of MBD1 expression in HAP-1 cells using MBD1 antibody (KVA00995, 1:2,000). Green, isotype control; red, MBD1.