

KD-Validated Anti-Methyl-CpG Binding Domain Protein 2 Rabbit Monoclonal Antibody
Rabbit monoclonal antibody
Catalog # AGI1833**Specification****KD-Validated Anti-Methyl-CpG Binding Domain Protein 2 Rabbit Monoclonal Antibody - Product Information**

Application	WB, FC
Primary Accession	Q9UBB5
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	Rabbit IgG
Calculated MW	Predicted, 43 kDa, observed, 43 kDa kDa
Gene Name	MBD2
Aliases	MBD2; Methyl-CpG Binding Domain Protein 2; Methyl-CpG-Binding Domain Protein 2; Demethylase; DMTase; Methyl-CpG-Binding Protein MBD2; NY-CO-41
Immunogen	A synthesized peptide derived from human MBD2

KD-Validated Anti-Methyl-CpG Binding Domain Protein 2 Rabbit Monoclonal Antibody - Additional Information

Gene ID 8932

Other Names

Methyl-CpG-binding domain protein 2, Demethylase, DMTase, Methyl-CpG-binding protein MBD2, MBD2 (http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=6917)
[HGNC:6917](#))

KD-Validated Anti-Methyl-CpG Binding Domain Protein 2 Rabbit Monoclonal Antibody - Protein InformationName MBD2 ([HGNC:6917](#))**Function**

Binds CpG islands in promoters where the DNA is methylated at position 5 of cytosine within CpG dinucleotides (PubMed:[9774669](http://www.uniprot.org/citations/9774669)). Binds hemimethylated DNA as well (PubMed:[10947852](http://www.uniprot.org/citations/10947852), PubMed:[24307175](http://www.uniprot.org/citations/24307175)). Recruits histone deacetylases and DNA methyltransferases to chromatin (PubMed:[10471499](http://www.uniprot.org/citations/10471499), PubMed:[10947852](http://www.uniprot.org/citations/10947852)). Acts as a component of the histone deacetylase NuRD complex which participates in the remodeling of chromatin (PubMed:[16428440](http://www.uniprot.org/citations/16428440), PubMed:[28977666](http://www.uniprot.org/citations/28977666)). Acts as a transcriptional repressor and plays a role in gene

silencing (PubMed:10471499, PubMed:10947852, PubMed:16415179). Functions as a scaffold protein, targeting GATAD2A and GATAD2B to chromatin to promote repression (PubMed:16415179). May enhance the activation of some unmethylated cAMP-responsive promoters (PubMed:12665568).

Cellular Location

Nucleus. Chromosome Note=Nuclear, in discrete foci (PubMed:12183469). Detected at replication foci in late S phase. Localizes to methylated chromatin (PubMed:16428440). Localizes to sites of DNA damage in a manner partially dependent on ZMYND8 (PubMed:27732854)

Tissue Location

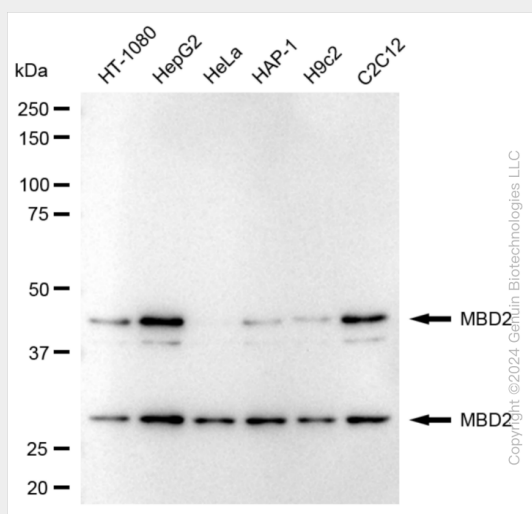
Highly expressed in brain, heart, kidney, stomach, testis and placenta.

KD-Validated Anti-Methyl-CpG Binding Domain Protein 2 Rabbit Monoclonal Antibody - Protocols

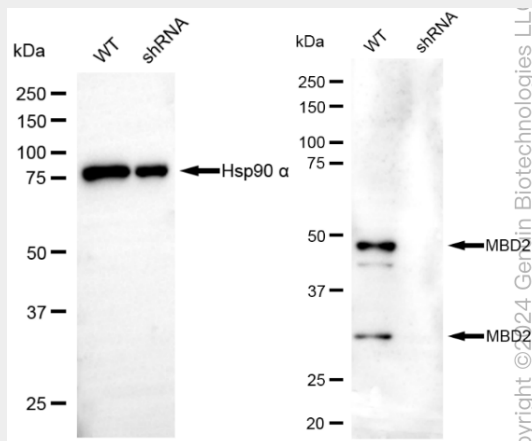
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

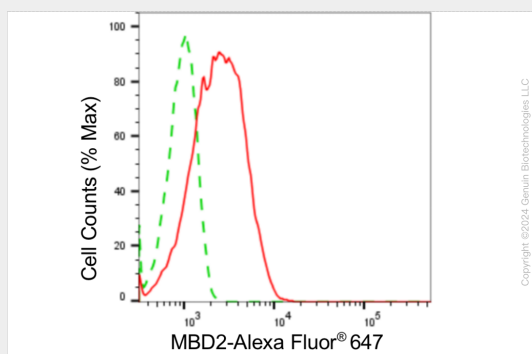
KD-Validated Anti-Methyl-CpG Binding Domain Protein 2 Rabbit Monoclonal Antibody - Images



Western blotting analysis using anti-MBD2 antibody (Cat#AGI1833). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-MBD2 antibody (Cat#AGI1833, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Western blotting analysis using anti-MBD2 antibody (Cat#AGI1833). MBD2 expression in wild-type (WT) and MBD2 shRNA knockdown (KD) HT-1080 cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-MBD2 antibody (Cat#AGI1833, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of MBD2 expression in HepG2 cells using anti-MBD2 antibody (Cat#AGI1833, 1:2,000). Green, isotype control; red, MBD2.