

**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	<a href="#">Q9UBB5</a>
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](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 Information****Name** 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:<a href="http://www.uniprot.org/citations/10471499" target="\_blank">10471499</a>, PubMed:<a href="http://www.uniprot.org/citations/10947852" target="\_blank">10947852</a>, PubMed:<a href="http://www.uniprot.org/citations/16415179" target="\_blank">16415179</a>). Functions as a scaffold protein, targeting GATAD2A and GATAD2B to chromatin to promote repression (PubMed:<a href="http://www.uniprot.org/citations/16415179" target="\_blank">16415179</a>). May enhance the activation of some unmethylated cAMP-responsive promoters (PubMed:<a href="http://www.uniprot.org/citations/12665568" target="\_blank">12665568</a>).

#### 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

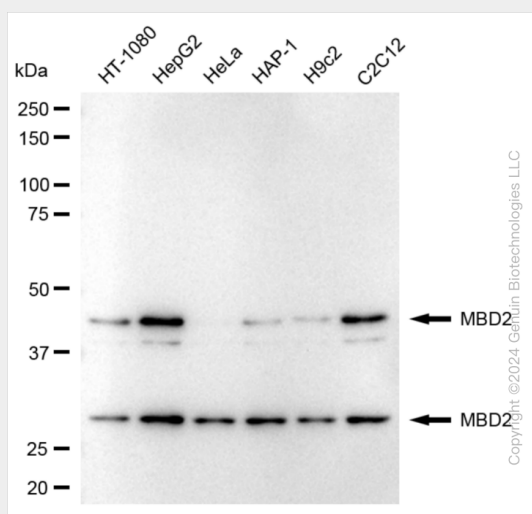
Highly expressed in brain, heart, kidney, stomach, testis and placenta.

### 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#63221). 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#63221, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (Cat#201, 1:20,000) respectively. Image was developed using NaQ™ ECL Substrate Kit

(Cat#716). MBD2, methyl-CpG binding domain protein 2.

