

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

Rabbit monoclonal antibody

Catalog # AGI1833

Product Information

Application	WB, FC
Primary Accession	Q9UBB5
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Names	24GB4570
Calculated MW	43255
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

Additional Information

Gene ID	8932
Other Names	Methyl-CpG-binding domain protein 2, Demethylase, DMTase, Methyl-CpG-binding protein MBD2, MBD2 (HGNC:6917)

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). Binds hemimethylated DNA as well (PubMed: 10947852 , PubMed: 24307175). Recruits histone deacetylases and DNA methyltransferases to chromatin (PubMed: 10471499 , PubMed: 10947852). Acts as a component of the histone deacetylase NuRD complex which participates in the remodeling of chromatin (PubMed: 16428440 , PubMed: 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.

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