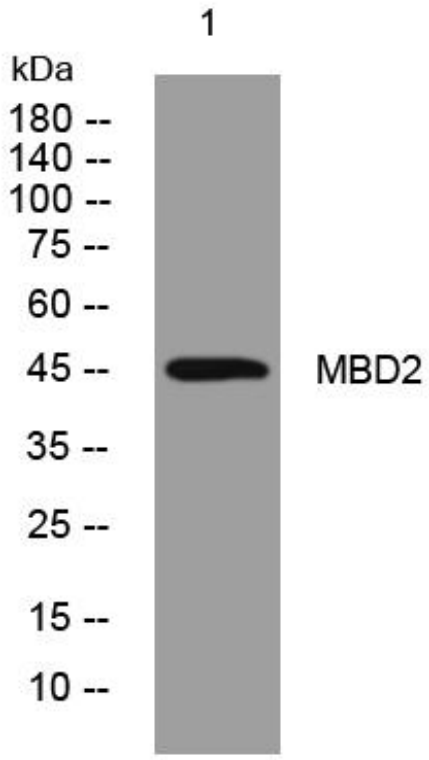
MBD2 mouse mAb

Catalog No	BYmab-11394
Isotype	IgG
Reactivity	Human; Mouse
Applications	WB
Gene Name	MBD2
Protein Name	MBD2
Immunogen	Synthesized peptide derived from human MBD2 AA range: 110-160
Specificity	This antibody detects endogenous levels of MBD2 at Human/Mouse
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	
Observed Band	
Cell Pathway	Nucleus . Nuclear, in discrete foci. Detected at replication foci in late S phase.
Tissue Specificity	Highly expressed in brain, heart, kidney, stomach, testis and placenta.
Function	function:Binds CpG islands in promoters where the DNA is methylated at position 5 of cytosine within CpG dinucleotides. Binds hemi-methylated DNA as well. Recruits histone deacetylases and DNA methyltransferases. Acts as transcriptional repressor and plays a role in gene silencing. Isoform 1 may enhance the activation of some unmethylated cAMP-responsive promoters. Reports about DNA demethylase activity of isoform 2 are contradictory.,similarity:Contains 1 MBD (methyl-CpG-binding) domain.,subcellular location:Nuclear, in discrete foci. Detected at replication foci in late S phase.,subunit:Heterodimer with MBD3. Part of the MeCP1 complex that contains HDAC1 and HDAC2. Binds DNMT1, MIZF, XAB1, SIN3A, p66-alpha and p66-beta. Isoform 1 binds DHX9, but isoform 2 does not.,tissue specificity:Highly expressed in brain, heart, kidney, stomach, testis and placenta.,

Background	DNA methylation is the major modification of eukaryotic genomes and plays an essential role in mammalian development. Human proteins MECP2, MBD1, MBD2, MBD3, and MBD4 comprise a family of nuclear proteins related by the presence in each of a methyl-CpG binding domain (MBD). Each of these proteins, with the exception of MBD3, is caMABle of binding specifically to methylated DNA. MECP2, MBD1 and MBD2 can also repress transcription from methylated gene promoters. The protein encoded by this gene may function as a mediator of the biological consequences of the methylation signal. It is also reported that the this protein functions as a demethylase to activate transcription, as DNA methylation causes gene silencing. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Feb 2011],
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis of various cells using MBD2 mouse mAb