

## MBD2 rabbit pAb

<b>Catalog No :</b>	YT6759
<b>Reactivity :</b>	Human;Mouse
<b>Applications :</b>	WB;ELISA;IHC
<b>Target :</b>	MBD2
<b>Gene Name :</b>	MBD2
<b>Protein Name :</b>	MBD2
<b>Human Gene Id :</b>	8932
<b>Human Swiss Prot No :</b>	Q9UBB5
<b>Mouse Gene Id :</b>	17191
<b>Mouse Swiss Prot No :</b>	Q9Z2E1
<b>Immunogen :</b>	Synthesized peptide derived from human MBD2 AA range: 110-160
<b>Specificity :</b>	This antibody detects endogenous levels of MBD2 at Human/Mouse
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Polyclonal, Rabbit,IgG
<b>Dilution :</b>	WB 1:500-2000;IHC 1:50-300; ELISA 2000-20000
<b>Purification :</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Concentration :</b>	1 mg/ml
<b>Storage Stability :</b>	-15°C to -25°C/1 year(Do not lower than -25°C)

**Molecularweight :** 45kD**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 capable 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],

**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.,

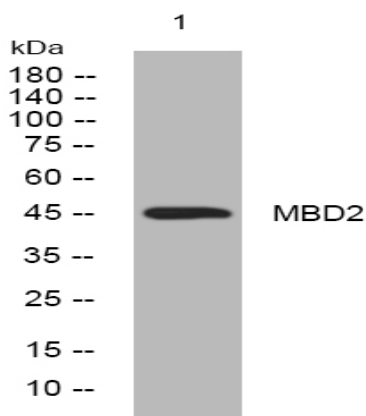
**Subcellular Location :**

Nucleus . Nuclear, in discrete foci. Detected at replication foci in late S phase.

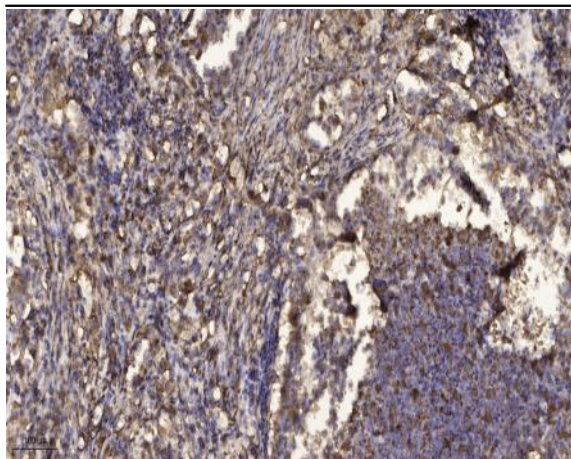
**Expression :**

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

## Products Images



Western blot analysis of lysates from SH-SY5Y cells, primary antibody was diluted at 1:1000, 4° over night



Immunohistochemical analysis of paraffin-embedded human Squamous cell carcinoma of lung. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).