



## Rabbit Anti-MBD1 antibody

SL5915R

<b>Product Name:</b>	MBD1
<b>Chinese Name:</b>	甲基化CpGBinding protein抗体
<b>Alias:</b>	CXXC 3; CXXC3; MBD 1; MBD1; MECP1 COMPLEX; Methyl CpG binding domain protein 1; Methyl CpG binding domain protein 1 isoform PCM1; Methyl CpG binding protein MBD1; Methyl CpG binding protein splice variant 1; Methyl CpG binding protein splice variant 2; Methyl CpG binding protein splice variant 3; Methyl CpG binding protein splice variant 4; PCM 1; PCM1; Protein containing methyl CpG binding domain 1; Regulator of fibroblast growth factor 2 (FGF 2) transcription; RFT; The regulator of fibroblast growth factor 2(FGF 2) transcription; MBD1 HUMAN.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,
<b>Applications:</b>	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	60kDa
<b>Cellular localization:</b>	The nucleus
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human MBD1:101-200/605
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	DNA methylation, or the addition of methyl groups to cytosine bases in the dinucleotide

CpG, is imperative to proper development and regulates gene expression. The methylation pattern involves the enzymatic processes of methylation and demethylation. The demethylation enzyme was recently found to be a mammalian protein, which exhibits demethylase activity associated to a methyl-CpG-binding domain (MBD). The enzyme is able to revert methylated cytosine bases to cytosines within the particular dinucleotide sequence mdCpdG by catalyzing the cleaving of the methyl group as methanol. MeCP2 and MBD1 (PCM1) are first found to repress transcription by binding specifically to methylated DNA. MBD2 and MBD4 (also known as MED1) were later found to colocalize with foci of heavily methylated satellite DNA and believed to mediate the biological functions of the methylation signal. Surprisingly, MBD3 does not bind methylated DNA both in vivo and in vitro. MBD1, MBD2, MBD3, and MBD4 are found to be expressed in somatic tissues, but the expression of MBD1 and MBD2 is reduced or absent in embryonic stem cells, which are known to be deficient in MeCP1 activity. MBD4 have homology to bacterial base excision repair DNA N-glycosylases/lyases. In some microsatellite unstable tumors MBD4 is mutated at an exonic polynucleotide tract.

**Subcellular Location:**

Nucleus speckle. Chromosome.

**Tissue Specificity:**

Widely expressed.

**Similarity:**

Contains 3 CXXC-type zinc fingers.

Contains 1 MBD (methyl-CpG-binding) domain.

**SWISS:**

Q9UIS9

**Gene ID:**

4152

**Database links:**

[Entrez Gene: 4152](#)Human

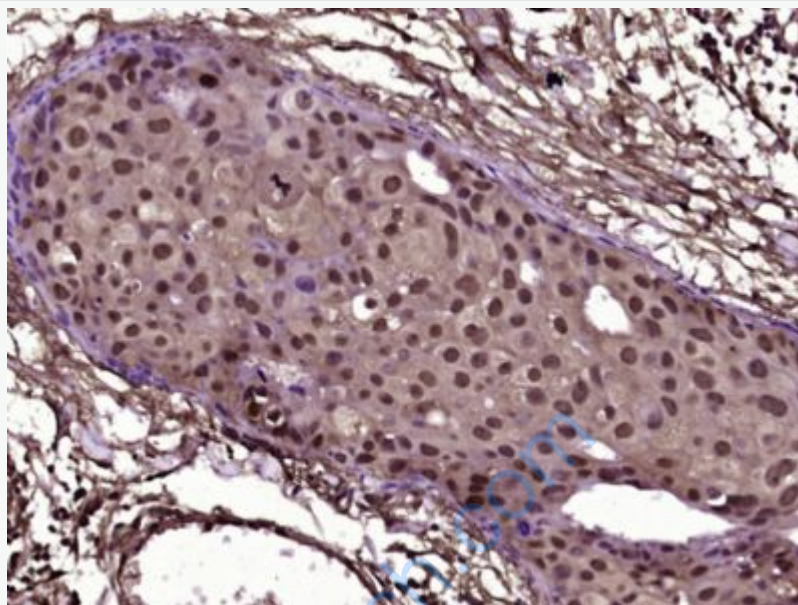
[Olim: 156535](#)Human

[SwissProt: Q9UIS9](#)Human

[Unigene: 405610](#)Human

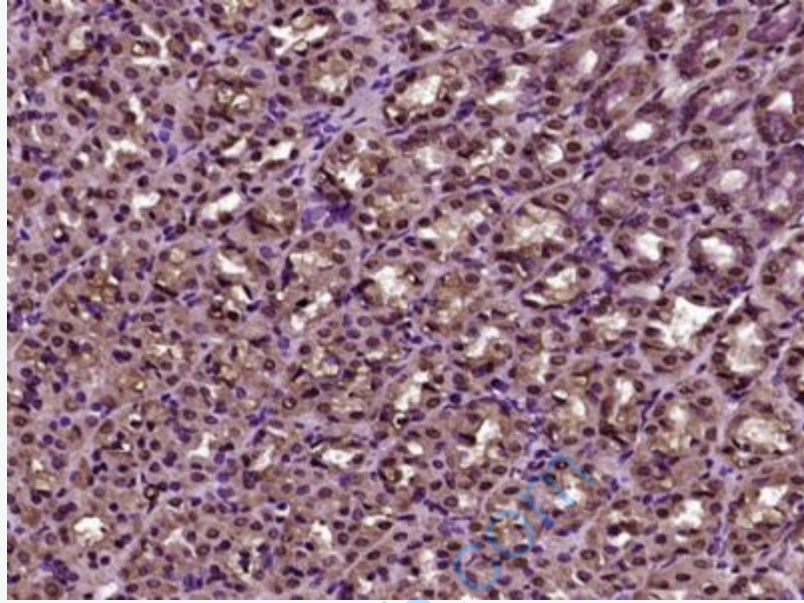
**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



**Picture:**

Paraformaldehyde-fixed, paraffin embedded (Human breast carcinoma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (MBD1) Polyclonal Antibody, Unconjugated (SL5915R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (Rat stomach); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (MBD1) Polyclonal Antibody, Unconjugated (SL5915R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.