

**MBD4 Antibody(Center)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP19391c****Specification**

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**MBD4 Antibody(Center) - Product Information**

Application	WB,E
Primary Accession	<a href="#">O95243</a>
Other Accession	<a href="#">NP_003916.1</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	66051
Antigen Region	323-351

**MBD4 Antibody(Center) - Additional Information****Gene ID** 8930**Other Names**

Methyl-CpG-binding domain protein 4, 322-, Methyl-CpG-binding endonuclease 1,  
Methyl-CpG-binding protein MBD4, Mismatch-specific DNA N-glycosylase, MBD4, MED1

**Target/Specificity**

This MBD4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 323-351 amino acids from the Central region of human MBD4.

**Dilution**

WB~~1:1000

E~~Use at an assay dependent concentration.

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

MBD4 Antibody(Center) is for research use only and not for use in diagnostic or therapeutic procedures.

**MBD4 Antibody(Center) - Protein Information****Name** MBD4 ([HGNC:6919](#))

**Function** Mismatch-specific DNA N-glycosylase involved in DNA repair. Has thymine glycosylase activity and is specific for G:T mismatches within methylated and unmethylated CpG sites. Can also remove uracil or 5-fluorouracil in G:U mismatches. Has no lyase activity. Was first identified as methyl-CpG-binding protein.

**Cellular Location**

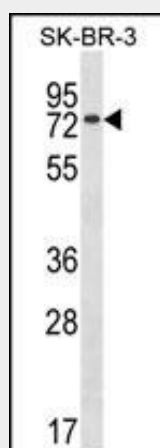
Nucleus.

**MBD4 Antibody(Center) - 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](#)

**MBD4 Antibody(Center) - Images**



MBD4 Antibody (Center)(Cat. #AP19391c) western blot analysis in SK-BR-3 cell line lysates (35ug/lane). This demonstrates the MBD4 antibody detected the MBD4 protein (arrow).

**MBD4 Antibody(Center) - 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. MBD4 may function to mediate the biological consequences of the methylation signal. In addition, MBD4 has protein sequence similarity to bacterial DNA repair enzymes and thus may have some function in DNA repair. Further, MBD4 gene mutations are detected in tumors with primary microsatellite-instability (MSI), a form of genomic instability associated with defective DNA mismatch repair,

and MBD4 gene meets 4 of 5 criteria of a bona fide MIS target gene.

#### **MBD4 Antibody(Center) - References**

Arora, M., et al. Leukemia 24(8):1470-1475(2010)  
Thyagarajan, B., et al. Biol. Blood Marrow Transplant. 16(8):1084-1089(2010)  
Ho-Pun-Cheung, A., et al. Pharmacogenomics J. (2010) In press :  
Briggs, F.B., et al. Am. J. Epidemiol. 172(2):217-224(2010)  
Liu, C.Y., et al. Carcinogenesis 31(7):1259-1263(2010)