

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

MBD4 Antibody(Center) - Product Information

Application	WB,E
Primary Accession	O95243
Other Accession	NP_003916.1
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

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

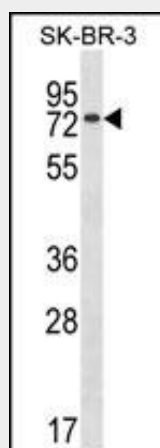
Nucleus.

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)