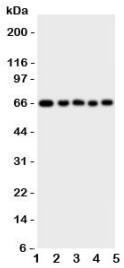
MBD4 Antibody (R31152)

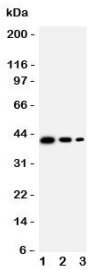
Catalog No.	Formulation	Size
R31152	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide/thimerosal
UniProt	O95243
Applications	Western blot: 0.5-1ug/ml
Limitations	This MBD4 antibody is available for research use only.



Western blot testing of MBD4 antbody; Lane 1: rat brain; 2: (r) kidney; 3: human A549; 4: (h) HeLa; 5: (h) MCF-7 cell lysate. Predicted molecular weight ~66 kDa.



Western blot testing of MBD4 antbody; Lane 1: Recombinant human protein 10ng; 2: 5ng; 3: 2.5ng

Description

Methyl-CpG-Binding Domain Protein 4, also known as MED1, is a protein that in humans is encoded by the MBD4 gene. MBD4 specifically binds methylated DNA, colocalizes with methylated sequences, and is likely to mediate the effects of DNA methylation in mammalian cells(Hendrich and Bird, 1998). Riccio et al.(1999) mapped the gene to chromosome 3q21-q22 by FISH. Hendrich and Bird(1998) found that both MBD2 and -4 specifically bound methylated DNA in vitro and colocalized with methylated sequences in vivo. They concluded that MBD2 and -4 are likely to be mediators of the effects of DNA methylation in mammalian cells. Hendrich et al.(1999) showed that MBD4 contains a methyl-CpG-binding domain that can efficiently remove thymine or uracil from mismatched CpG sites in vitro. Furthermore, the methyl-CpG-binding domain of MBD4 binds preferentially to 5-methylcytosine CpG-TpG mismatches--the primary product of deamination at methyl-CpG.

Application Notes

The stated application concentrations are suggested starting amounts. Titration of the MBD4 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

An amino acid sequence from the C-terminus of human Methyl-CpG-Binding Domain Protein 4 (YHDWLWENHEKLSLS) was used as the immunogen for this MBD4 antibody (100% homologous in human, mouse and rat).

Storage

After reconstitution, the MBD4 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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