

Datasheet for ABIN3044062  
**anti-MBD4 antibody (C-Term)**

## 2 Images

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## Overview

Quantity:	100 µg
Target:	MBD4
Binding Specificity:	AA 566-580, C-Term
Reactivity:	Human, Rat
Host:	Rabbit
Clonality:	Polyclonal
Application:	Western Blotting (WB)

## Product Details

Purpose:	Rabbit IgG polyclonal antibody for Methyl-CpG-binding domain protein 4(MBD4) detection. Tested with WB in Human,Mouse,Rat.
Immunogen:	A synthetic peptide corresponding to a sequence at the C-terminus of human MBD4(566-580aa YHDWLWENHEKLSLS), identical to the related rat and mouse sequences.
Sequence:	YHDWLWENHE KLSLS
Isotype:	IgG
Cross-Reactivity (Details):	Predicted Cross Reactivity: mouse No cross reactivity with other proteins. Predicted Cross Reactivity: Species predicted to be fit for the product based on sequence similarities.
Characteristics:	Rabbit IgG polyclonal antibody for Methyl-CpG-binding domain protein 4(MBD4) detection. Tested with WB in Human,Mouse,Rat.

## Product Details

Gene Name: methyl-CpG binding domain protein 4  
Protein Name: Methyl-CpG-binding domain protein 4

Purification: Immunogen affinity purified.

## Target Details

Target: MBD4

Alternative Name: MBD4 ([MBD4 Products](#))

Background: MBD4(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 MBD4 gene to chromosome 3q21-q22 by FISH. Hendrich and Bird(1998) found that both MBD2 and MBD4 specifically bound methylated DNA in vitro and colocalized with methylated sequences in vivo. They concluded that MBD2 and MBD4 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.

Synonyms: 3 N(4) ethenocytosine glycosylase antibody|G/5 fluorouracil mismatch glycosylase with biphasic kinetics antibody|G/T mismatch glycosylase antibody|G/U mismatch glycosylase antibody|MBD 4 antibody|MBD4 antibody|MBD4\_HUMAN antibody|MED 1 antibody|MED1 antibody|Methyl CpG binding domain protein 4 antibody|Methyl CpG binding endonuclease 1 antibody|Methyl CpG binding protein MBD4 antibody|Methyl-CpG-binding domain protein 4 antibody|Methyl-CpG-binding endonuclease 1 antibody|Methyl-CpG-binding protein MBD4 antibody|Mismatch specific DNA N glycosylase antibody|Mismatch-specific DNA N-glycosylase antibody

UniProt: [O95243](#)

Pathways: [DNA Damage Repair](#)

## Application Details

Application Notes: WB: Concentration: 0.1-0.5 µg/mL, Tested Species: Human, Rat, Predicted Species: Mouse, The detection limit for MBD4 is approximately 1 ng/lane under reducing conditions.

## Application Details

Notes: Tested Species: Species with positive results. Predicted Species: Species predicted to be fit for the product based on sequence similarities.

Other applications have not been tested. Optimal dilutions should be determined by end users.

Comment: Antibody can be supported by chemiluminescence kit ABIN921124 in WB.

Restrictions: For Research Use only

## Handling

Format: Lyophilized

Reconstitution: Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.

Concentration: 500 µg/mL

Buffer: Each vial contains 5 mg BSA, 0.9 mg NaCl, 0.2 mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05 mg Thimerosal, 0.05 mg Sodium azide.

Preservative: Thimerosal (Merthiolate), Sodium azide

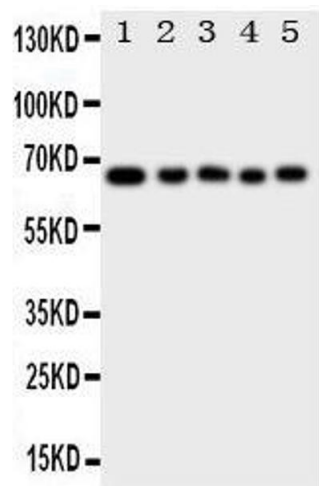
Precaution of Use: This product contains Sodium azide and Thimerosal (Merthiolate): POISONOUS AND HAZARDOUS SUBSTANCES which should be handled by trained staff only.

Handling Advice: Avoid repeated freezing and thawing.

Storage: 4 °C/-20 °C

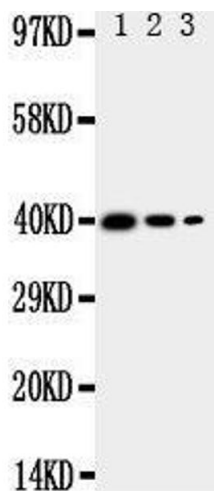
Storage Comment: At -20°C for one year. After reconstitution, at 4°C for one month.  
It can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.

Expiry Date: 12 months



Western Blotting

**Image 1.** Anti-MBD4 antibody, Western blotting Lane 1: Rat Brain Tissue Lysate Lane 2: Rat Kidney Tissue Lysate Lane 3: A549 Cell Lysate Lane 4: HELA Cell Lysate Lane 5: MCF-7 Cell Lysate



Western Blotting

**Image 2.**