# RD SYSTEMS a biotechne brand

# Human/Mouse MBD4 Antibody

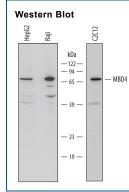
Antigen Affinity-purified Polyclonal Goat IgG Catalog Number: AF5935

DESCRIPTION	
Species Reactivity	Human/Mouse
Specificity	Detects human and mouse MBD4 in Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human MBD4 Met382-Ser580 Accession # O95243
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 μm filtered solution in PBS.

### APPLICATIONS

Please Note: Optimal dilutions should be c	letermined by each laboratory for each applica	tion. General Protocols are available in the Technical Information section on our website.
	Recommended Concentration	Sample
Western Blot	1 μg/mL	See Below

### DATA



Detection of Human and Mouse MBD4 by Western Blot. Western blot shows lysates of HepG2 human hepatocellular carcinoma cell line, Raji human Burkitt's lymphoma cell line, and C2C12 mouse myoblast cell line. PVDF membrane was probed with 1 µg/mL of Goat Anti-Human/Mouse MBD4 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5935) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF019). A specific band was detected for MBD4 at approximately 68 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

PREPARATION AND STORAGE			
Reconstitute at 0.2 mg/mL in sterile PBS.			
The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C			
Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul> <li>12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>6 months -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>			
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#### BACKGROUND

MBD4 (Methyl CpG-binding domain protein 4; also MED1) is a 65-68 kDa member of the methyl CpG binding protein family. It is expressed in non-germline cells, and serves at least two functions: one, it interacts with FADD to up- or down-regulate apoptosis, and two, it acts as a DNA N-glycosylase that excises improper chromosomal thymines that are created through the spontaneous deamination of methylcytosine to thymine. Human MDB4 is 580 amino acids (aa) in length. It contains one DNA-binding MBD domain (aa 76-148) and one endonuclease domain (aa 455-580). There are three isoform variants. One shows a deletion of aa 395-400, another shows an AlaPro substitution for aa 539-580, and a third shows a Gln substitution for aa 83-401. Over aa 382-580, human MBD4 shares 90% aa identity with mouse MBD4.

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