

## TECHNICAL DATASHEET

## MBD1 polyclonal antibody

Other names: CXXC3, PCM1, RFT

Cat. No. C15410038 Type: Polyclonal	<b>Specificity:</b> Human: positive Other species: not tested	
Source: Rabbit Lot #: A1223P Size: 50 μg/ 84 μl Concentration: 0.6 μg/μl	<b>Purity:</b> Affinity purified polyclonal antibody in PBS containing 0.05% azide and 0.05% ProClin 300.	
	<b>Storage:</b> Store at -20°C; for long storage, store at -80°C. Avoid multiple freeze-thaw cycles.	
	<b>Precautions:</b> This product is for research use only. Not for use in diagnostic or therapeutic procedures.	

**Description:** Polyclonal antibody raised in rabbit against human MBD1 (Methyl-CpG-binding domain protein 1), using 3 KLH-conjugated synthetic peptides, two containing a sequence from the C-terminal part and one containing a sequence from the N-terminal part of the protein.

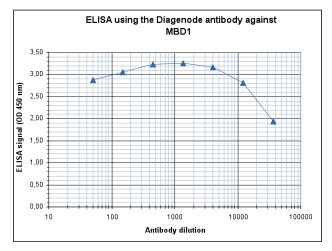
## **Applications**

	Suggested dilution	Results
ELISA	1:1,000	Fig 1
Western blotting	1:1,000	Fig 2

## Target description

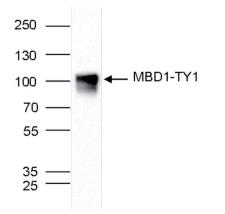
MBD1 (UniProt/Swiss-Prot entry Q9UIS9) is a transcriptional repressor that specifically binds to methylated CpG dinucleotides in promoter sequences. MBD1 acts by recruiting a variety of histone deacetylases (HDAC's) and chromatin remodelling factors. MBD1-dependent transcriptional repression is mediated by ATF7IP through the recruitment of factors such as the histone methyltransferase SETDB1. MBD1 probably forms a complex with SETDB1 and ATF7IP which couples DNA methylation to H3K9 trimethylation and represses transcription.

### Results



#### Figure 1. Determination of the antibody titer

To determine the titer of the antibody, an ELISA was performed using a serial dilution of the Diagenode antibody directed against human MBD1 (cat. No. C15410038) in antigen coated wells. By plotting the absorbance against the antibody dilution (Figure 1), the titer of the antibody was estimated to be 1:54,000.



# Figure 2. Western blot analysis using the Diagenode antibody directed against MBD1

HeLa cells were transfected with an expression vector for TY1-tagged MBD1. The presence of the TY1-MBD1 in the cell lysates was demonstrated by western blot analysis with the Diagenode antibody against MBD1 (cat. No. C15410038) diluted 1:1,000 in TBST containing 5% milk powder. The position of the protein of interest is indicated on the right, the marker (in kDa) is shown on the left.

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