diagenode
A Hologic Company

TECHNICAL DATASHEET

PRODUCT NAME MBD2 polyclonal antibody		
Other names: DMTase		
Cat. No. C15310098 (CS-098-100)	**Type:** Polyclonal	**Size:** 100 µl
Lot #: A368-004	**Source:** Rabbit	**Concentration:** not determined

Description: Polyclonal antibody raised in rabbit against mouse MBD2 (methyl-CpG binding domain protein 2), using a KLH-conjugated synthetic peptide containing an amino acid sequence from the central part of the protein (1).

Specificity: Mouse: positive
Other species: not tested

Applications	Suggested dilution	References
ELISA	1:1,000 – 1:4,000	Fig 1
Western blotting	1:500	Fig 2, (1)

Purity: Whole antiserum from rabbit containing 0.05% azide.

Storage: Store at -20°C/ -80°C. Avoid multiple freeze-thaw cycles.

Precautions: This product is for research use only. Not for use in diagnostic or therapeutic procedures.

References:

(1) Peptide design by Andrea Kranz, Western blot analysis by Heike Petzold and Andrea Kranz, BIOTEC, Dept. of Genomics, Prof. F. Stewart, TU Dresden, Tatzberg 47/49, 01307 Dresden, Germany

Last data sheet update: April 7, 2010

Target description

MBD2 (UniProtKB/Swiss-Prot entry Q9UBB5) belongs to the family of methylated DNA binding proteins. The protein acts as a transcriptional repressor that specifically binds to methylated CpG dinucleotides in promoter sequences. It is part of the MeCP1 complex that also contains the histone deacetylases HDAC1 and HDAC2. On the other hand, MBD2 may be able to demethylate DNA, thus acting as a transcriptional activator. Possibly, MBD2 mediates the effects of DNA methylation in vivo.

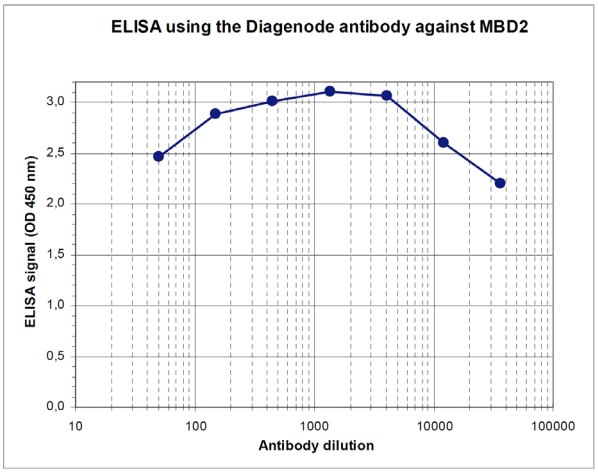

Figure 1
Determination of the titer
To determine the titer, an ELISA was performed using a serial dilution of the Diagenode antibody directed against mouse MBD2 (Cat. No. CS-098-100). By plotting the absorbance against the antibody dilution (Figure 1), the titer of the antibody was estimated to be 1:185,000.

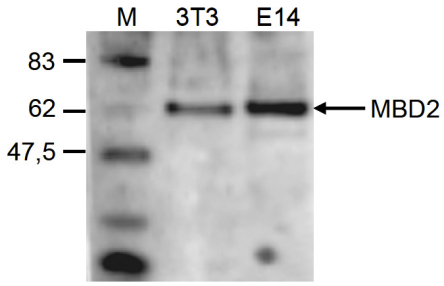

Figure 2
Western blot analysis using the Diagenode antibody directed against MBD2 (1)
Western blot was performed on nuclear extracts from mouse fibroblastst (NIH3T3) and embryonic stem cells (E14Tg2a) with the Diagenode antibody against mouse MBD2 (Cat. No. CS-098-100), diluted 1:500 in BSA/PBS-Tween. The molecular weight marker (M, in kDa) is shown on the left; the location of the protein of interest is indicated on the right.