TECHNICAL DATA SHEET

PRODUCT NAME MBD4 polyclonal antibody		
Other names: MED1		
Cat. No. C15310087 (CS-087-100)	**Type:** Polyclonal	**Size:** 100 µl
Lot #: A129-004	**Source:** Rabbit	**Concentration:** not determined

Description: Polyclonal antibody raised in rabbit against human MBD4 (Methyl-CpG-binding domain protein 4), using three different KLH-conjugated synthetic peptides.

Specificity: Human: positive
Other species: not tested

Applications	Suggested dilution	References
ELISA	1:100 – 1:1,000	Fig 1
Western blotting	1:2,000	Fig 2

Purity: Whole antiserum from rabbit containing 0.05% azide.

Storage: Store at -20°C; for long storage, store at -80°C. Avoid multiple freeze-thaw cycles.

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

Last data sheet update: April 7, 2010

Target description
MBD4 (UniProt/Swiss-Prot entry O95243) belongs to the family of methyl CpG binding proteins that specifically bind to methylated CpG dinucleotides. MBD4 probably functions to mediate the biological consequences of CpG methylation. Further, MBD4 has thymine glycosylase activity and is involved in DNA repair. Mutations of MBD4 are associated with tumors with primary microsatellite-instability, a type of genomic instability that is caused by a defective DNA mismatch repair.

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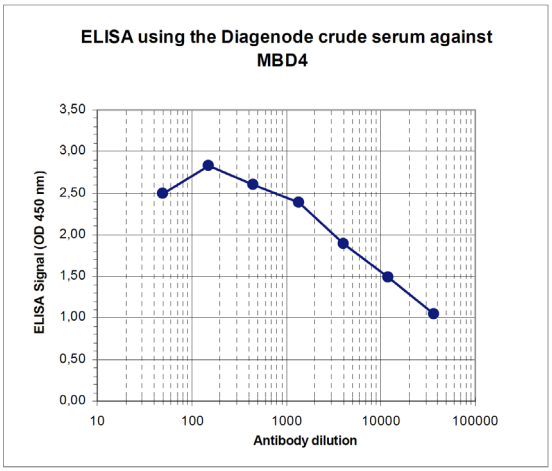

Figure 1
Determination of the titer
To determine the titer, an ELISA was performed using a serial dilution of the Diagenode antibody directed against human MBD4 (Cat. No. CS-087-100) in antigen coated wells. The wells were coated with the peptides used for immunisation of the rabbit. By plotting the absorbance against the antibody dilution (Figure 1), the titer of the antibody was estimated to be 1:15,000.

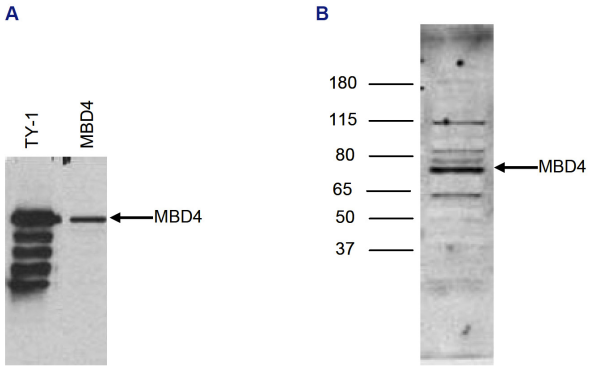

Figure 2
Western blot analysis using the Diagenode antibody directed against MBD4
Figure 2A: Human osteosarcoma cells (U2OS) were transfected with an expression vector for TY1-tagged MBD4. The presence of TY1-MBD4 in the cell lysates was demonstrated by western blot analysis with the Diagenode antibody against the TY1-tag (Cat. No. MAb-054-050) (lane 1) and with the antibody against MBD4 (Cat. No. CS-087-100) (lane 2), diluted 1:2,000 in TBST containing 3% milk powder.
Figure 2B: Western blot was performed on nuclear extracts from the U937 human leukemic monocyte lymphoma cell line (40 µg) with the antibody against MBD4, diluted 1:2,000 in TBST containing 3% milk powder. A molecular weight marker (in kDa) is shown on the left. The location of the protein of interest is indicated on the right.