diagenode
A Hologic Company

TECHNICAL DATASHEET

PRODUCT NAME MBD3 polyclonal antibody		
Cat. No. C15310079 (CS-079-100)	**Type:** Polyclonal	**Size:** 100 µl
Lot #: A127-004	**Source:** Rabbit	**Concentration:** not determined

Description: Polyclonal antibody raised in rabbit against human MBD3 (Methyl-CpG-binding domain protein 3), using three different KLH-conjugated synthetic peptides.

Specificity: Human: positive
Other species: not tested

Applications	Suggested dilution	References
ELISA	1:100 – 1:500	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
MBD3 (UniProtKB/Swiss-Prot entry O95983) is a transcriptional repressor which plays a role in gene silencing. Surprisingly, MBD3 does not seem to bind methylated DNA by itself, but acts by the recruitment of histone deacetylases and DNA methyltransferases. MBD3 also forms a heterodimer with MBD2 and is part of the NuRD and the MeCP1 complex. Further, MBD3 interacts with HDAC1, MTA2, DNMT1, p66-alpha and p66-beta.

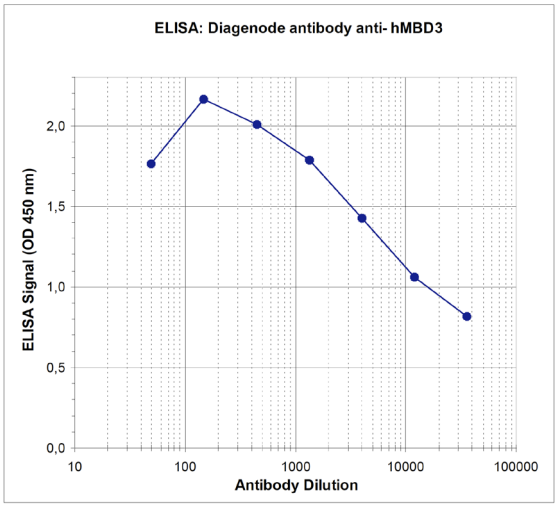

Figure 1

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 MBD3 (cat# CS-079-100). 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 1:13,890.

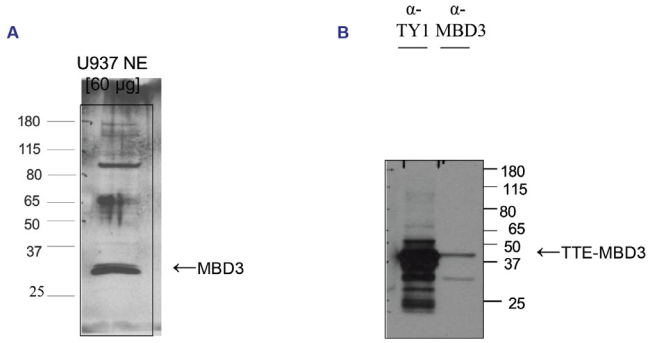

Figure 2

Western blot analysis using the Diagenode antibody directed against MBD3

Figure 2A: Western blot was performed on nuclear extracts from a Human leukemic monocyte lymphoma cell line (U937 NE, 60 µg) with the Diagenode antibody against human MBD3 (Cat. No. CS-079-100), diluted 1:2,000 in TBS-Tween containing 5% skimmed milk. The molecular weight marker (in kDa) is shown on the left; the location of the protein of interest is indicated on the right.

Figure 2B: TY1-tagged MBD3 (TTE-MBD3) was over-expressed in osteosarcoma cells (U2OS). Nuclear extracts were prepared and separated by electrophoresis. An antibody directed against the TY1 tag or the antibody against MBD3 (diluted 1:2,000 in TBS-Tween containing 5% skimmed milk) were used to detect TTE-MBD3 (lane 1 and 2, respectively). The location of tagged MBD3 is indicated with an arrow.