TECHNICAL DATA SHEET

PRODUCT NAME DNMT1 polyclonal antibody		
Other names: DNMT, MCMT, CXXC9, AIM		
Cat. No. C15310077 (CS-077-100)	**Type:** Polyclonal	**Size:** 100 µl
Lot #: A13-002	**Source:** Rabbit	**Concentration:** not determined

Description: Polyclonal antibody raised in rabbit against mouse DNMT1 (DNA (cytosine-5)-methyltransferase 1), using a KLH-conjugated synthetic peptide containing a sequence from the N-terminus.of the protein.

Specificity: Mouse: positive
Other species: not tested

Applications	Suggested dilution	References
ELISA	1:1,000	Fig 1
Western blotting	1:500	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
DNMT1 (UniProt/Swiss-Prot entry P26358) preferentially methylates CpG residues in hemimethylated DNA and is responsible for maintaining methylation patterns established in development. DNA methylation is coordinated with methylation of histones. Inactivation of DNMT1 causes global demethylation and embryonic lethality. Transcriptional repression by DNMT1 is mediated by direct interaction with HDAC2.

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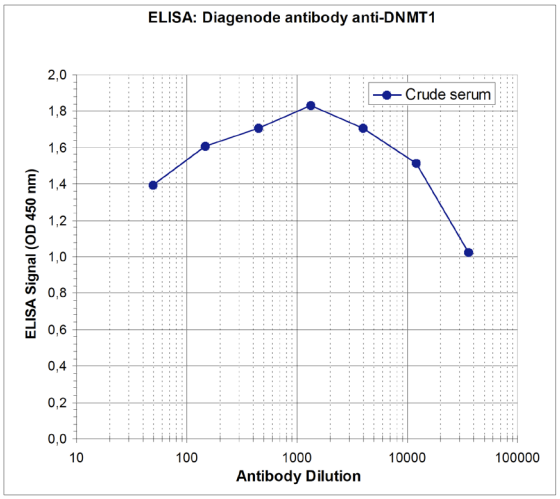

Figure 1

Determination of the antibody titer

To determine the titer of the antibody, an ELISA was performed using a serial dilution of Diagenode antibody directed against mouse DNMT1 (Cat. No. CS-077-100). The wells were coated with the peptide 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: 44,800

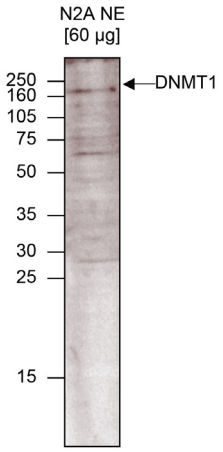

Figure 2

Western blot analysis using the Diagenode antibody directed against DNMT1

Western blot was performed on nuclear extracts from N2A cells (N2A NE, 60 µg) with the Diagenode antibody against mouse DNMT1 (Cat. No. CS-077-100), diluted 1:500 in TBS-Tween containing 5% skimmed milk (Figure 2). The molecular weight marker (in kDa) is shown on the left; the location of the protein of interest is indicated on the right.