

PRODUCT NAME		
DNMT1 polyclonal antibody		
Other names: Dnmt, Met1, Met-1, Uim, MCMT, M.Mmul		
<b>Cat. No.</b> C15310111 (CS-111-100)	<b>Type:</b> Polyclonal	<b>Size:</b> 100 µl
<b>Lot #:</b> A386-004	<b>Source:</b> Rabbit	<b>Concentration:</b> not determined

**Description:** Polyclonal antibody raised in rabbit against mouse DNMT1 (DNA (cytosine-5)-methyltransferase 1), using a KLH-conjugated synthetic peptide containing an amino acid sequence from the C-terminal part of the protein [1].

**Specificity:** Mouse: positive  
Other species: not tested

Applications	Suggested dilution	References
ELISA	1:100 – 1:1,000	Fig 1
Western blotting	1:500	Fig 2 [1]

**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.

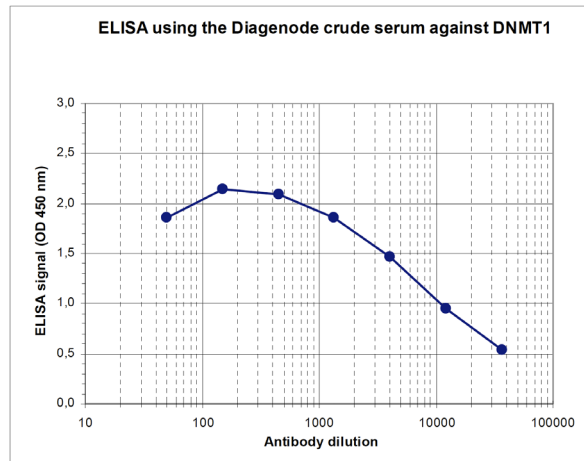
**References:**

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

**Last data sheet update:** April 6, 2010

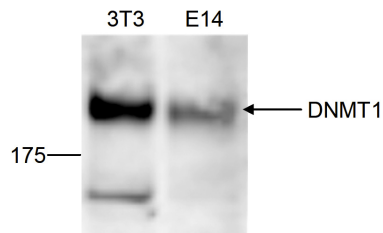
**Target description**

DNMT1 (UniProt/Swiss-Prot entry P26358) preferentially methylates CpG residues in hemimethylated DNA and is responsible for maintaining methylation patterns established in development. Inactivation of DNMT1 causes global demethylation and embryonic lethality. DNA methylation is coordinated with methylation of histones. Transcriptional repression by DNMT1 is mediated by direct interaction with HDAC2.



**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 DNMT1 [Cat. No. CS-111-100]. The plates were coated with the peptide used for immunization of the rabbit. By plotting the absorbance against the antibody dilution (Figure 1), the titer of the antibody was estimated to be 1:9,600.



**Figure 2**  
**Western blot analysis using the Diagenode antibody directed against DNMT1 (1)**

Western blot was performed on whole cell lysates from mouse fibroblasts (NIH3T3) and embryonic stem cells (E14Tg2a) with the Diagenode antibody against mouse DNMT1 [Cat. No. CS-111-100], diluted 1:500 in BSA/PBS-Tween. The molecular weight marker (in kDa) is shown on the left; the location of the protein of interest (expected size: 183 kDa) is indicated on the right.