

PRODUCT NAME DNMT3A polyclonal antibody		
Cat. No. C15310107 (CS-107-100)	Type: Polyclonal	Size: 100 µl
Lot #: A388-001	Source: Rabbit	Concentration: not determined

Description: Polyclonal antibody raised in rabbit against mouse DNMT3 (DNA methyltransferase 3A), using two KLH-conjugated synthetic peptides containing an amino acid sequence from the central part of the protein.

Specificity: Human, Mouse: positive
Other species: not tested

Applications	Suggested dilution	References
ELISA	1:1,000 – 1:10,000	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

DNMT3A (UniProtKB/Swiss-Prot entry Q9Y6K1) catalyses the genome wide de novo methylation of CpG residues. DNA methylation on CpG residues by DNMT3A regulates gene expression and is essential for development. DNMT3A is strongly expressed in embryonic stem cells, but low in adult somatic cells. DNA methylation is coordinated with methylation of histones. DNMT3A binds to SETDB1 and HDAC1, and is involved in the repression of transcription from promoters containing an E2F binding site.

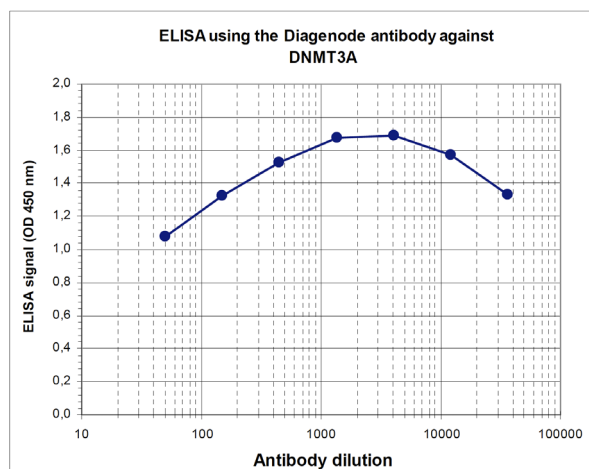


Figure 1
Determination of the titer

To determine the titer of the antibody, an ELISA was performed using a serial dilution of Diagenode antibody directed against mouse DNMT3A [Cat. No. CS-107-100]. 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 1:86,500.

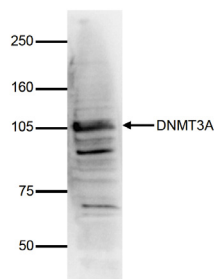


Figure 2
Western blot analysis using the Diagenode antibody directed against DNMT3A

Nuclear extracts of HeLa cells (40 µg) were analysed by Western blot using the Diagenode antibody against mouse DNMT3A [Cat. No. CS-107-100] diluted 1:500 in TBS-Tween containing 5% skimmed milk. The position of the protein of interest is indicated on the right; the marker (in kDa) is shown on the left.