

PRODUCT NAME DNMT3A polyclonal antibody		
Cat. No. C15410084 (pAb-084-050)	Type: Polyclonal	Size: 50 µg/ 67 µl
Lot #: A66-001	Source: Rabbit	Concentration: 0.75 µg/µl

Description: Polyclonal antibody raised in rabbit against human DNMT3A, (DNA methyltransferase 3A), using a KLH-conjugated synthetic peptide corresponding to amino acids 44-58.

Specificity: Human: positive
Other species: not tested

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

Format: Affinity purified polyclonal antibody in PBS containing 0.05% azide and 0.05% ProClin 300.

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: March 4, 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.

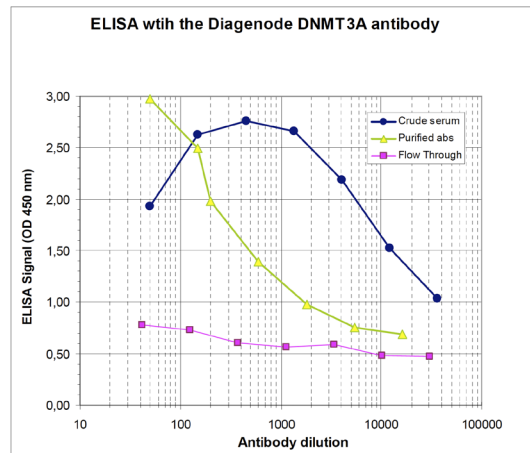


Figure 1
Determination of the antibody titer

To determine the titer of the antibody, an ELISA was performed using a serial dilution of Diagenode antibody directed against human DNMT3A (Cat. No. pAb-084-050), crude serum and Flow Through, in antigen coated wells. By plotting the absorbance against the antibody dilution (Figure 1), the titer of the antibody was estimated to be 1:500.

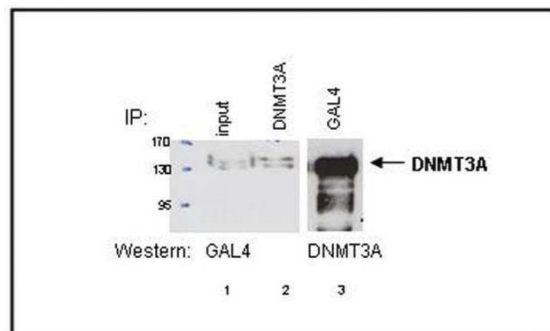


Figure 2
Western blot and Immunoprecipitation using the Diagenode antibody directed against DNMT3A

Human embryonic kidney cells (HEK293T) were transiently transfected with an expression vector for GAL4-tagged DNMT3A. Whole cell extracts were immunoprecipitated with 2 µg of antibody against DNMT3A (Cat. No. pAb-084-050). The presence of GAL4-DNMT3A in the non-treated cell extracts and in the immunoprecipitates was demonstrated by western blot analysis with anti-GAL4 antibody (lane 1 and 2 respectively). Alternatively, GAL4-DNMT3A was immunoprecipitated and western blot analysis was performed with the DNMT3A antibody (diluted 1:2,000) (lane 3).