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Innovating Epigenetic Solutions

PRODUCT NAME Setd1a polyclonal antibody			
Other names: SET1, SET1A, KMT2F			
Cat. No. CS-117-100	Type: Polyclonal	Size: 100 μl	
Lot #: A277-004	Source: Rabbit	Concentration: not determined	

Description: Polyclonal antibody raised in rabbit against mouse Setd1a (Set domain containing 1A), using three KLH-conjugated synthetic peptides: two containing an amino acid sequence from the N-terminal part of the protein and one containing an amino acid sequence from the central part of the protein (1).

Specificity: Mouse: positive

Other species: not tested

Applications	Suggested dilution	References
ELISA	1:100	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: March 23, 2010

Target description

SETD1A (UniProt/Swiss-Prot entry 015047) is a component of the SET1 histone methyltransferase (HMT) complex. This complex specifically methylates lysine 4 of histone H3, but only if the neighboring lysine 9 residue is not yet methylated. Methylation of H3K4 represents a specific tag for epigenetic transcriptional activation. SETD1A shows a non-overlapping localization with SETD1B, suggesting that both proteins play a specific role in the epigenetic control of chromatin structure and gene expression.

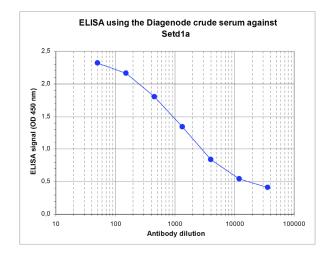


Figure 1

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Determination of the titer

To determine the titer, an ELISA was performed using a serial dilution of the Diagenode antibody directed against mouse Setd1a (Cat. No. CS-117-100). The plates were coated with a mix of the peptides 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 1:2,500.

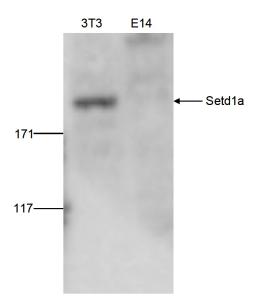


Figure 2

Western blot analysis using the Diagenode antibody directed against mouse Setd1a (1)

Western blot was performed on whole cell lysates from mouse fibroblasts (NIH3T3) and embryonic stem cells (E14Tg2a) with the Diagenode antibody against mouse Setd1a (Cat. No. CS-117-100), 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: 186 kDa) is indicated on the right.