TECHNICAL DATA SHEET

PRODUCT NAME JMJD2a polyclonal antibody		
Other names: JHDM3A, KDM4A, JMJD2		
Cat. No. C15410126 (pAb-126-050)	**Type:** Polyclonal	**Size:** 50 µg /76 µl
Lot #: A288-0011	**Source:** Rabbit	**Concentration:** 0.66 µg/µl

Description: Polyclonal antibody raised in rabbit against human JMJD2a (Jumonji domain containing 2a), using a KLH-conjugated synthetic peptide containing a sequence from the central part of the protein.

Specificity: Human: positive
Other species: not tested

Applications	Suggested dilution	References
ELISA	1:100 – 1:500	Fig 1
Western blotting	1:500	Fig 2

Purity: 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
JMJD2a (UniProtKB/Swiss-Prot entry O75164), belongs to the JMJD2 family of histone demethylases which play an important role in the establishment of the histone code. JMJD2a specifically demethylates the trimethylated K9 and K36 of histone H3, thereby converting these lysines to the dimethylated form. It has no activity towards H3K4, H3K27 and H4K20, or to the mono- and dimethylated H3K9 and H3K36. JMJD2a plays a role in the transcriptional repression of ASCL2 and E2F-responsive promoters via the recruitment of histone deacetylases and NCOR1, respectively.

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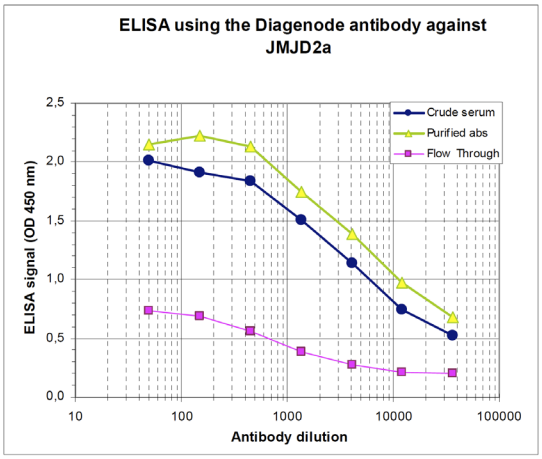

Figure 1
Determination of the titer
To determine the titer of the antibody, an ELISA was performed using a serial dilution of the Diagenode antibody directed against human JMJD2a (Cat. No. pAb-126-050), crude serum and flow through. The plates were coated with the peptide used for immunization of the rabbit. By plotting the absorbance against the antibody dilution (Figure 1), the titer of the antibody was estimated to be 1:9,000.

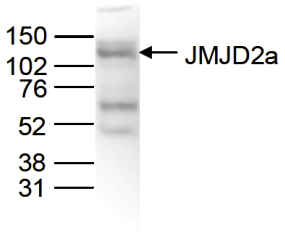

Figure 2
Western blot analysis using the Diagenode antibody directed against JMJD2a
Nuclear extracts from HeLa cells (40 µg) were analysed by Western blot using the Diagenode antibody against JMJD2a (Cat. No. pAb-126-050) diluted 1:500 in TBS-Tween containing 5% skimmed milk. The position of the protein of interest is indicated on the right (expected size 121 kDa); the marker (in kDa) is shown on the left.