

# TECHNICAL DATASHEET

# JMJD2b polyclonal antibody

Other names: JHDM3b, KDM4b

Cat. No. C15310104 (CS-104-100)	Specificity: Human: positive - Other species: not tested.	
Type: Polyclonal	Purity: Whole antiserum from rabbit containing 0.05% azide.	
Source: Rabbit	<b>Storage:</b> Store at -20°C; for long storage, store at -80°C.	
Lot #: A302-004	Avoid multiple freeze-thaw cycles.	
<b>Size։</b> 100 µl	Precautions: This product is for research use only. Not for	
Concentration: not determined	use in diagnostic or therapeutic procedures.	

**Description:** Polyclonal antibody raised in rabbit against human JMJD2b (Jumonji Domain containing 2b), using a KLH-conjugated synthetic peptide containing an amino acid sequence from the central part of the protein.

## **Applications**

	Suggested dilution	References
ELISA	1:200	Fig 1
Western blotting	1:1,000	Fig 2
Immunofluorescence	1:200	Fig 3

## Target description

JMJD2b (UniProtKB/Swiss-Prot entry 094953), belongs to the JMJD2 family of histone demethylases which play an important role in the establishment of the histone code. JMJD2b specifically demethylates the trimethylated K9 of histone H3. It is not able to demethylate K4, K27 and K36 of histone H3, nor K20 of histone H4.

### Results



#### Figure 1. Determination of the titer

To determine the titer, an ELISA was performed using a serial dilution of the Diagenode antibody directed against human JMJD2b (Cat. No. C15310104). The wells were coated with the peptide 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 1:3,000.



# Figure 2. Western blot analysis using the Diagenode antibody directed against JMJD2b

Nuclear extracts of HeLa cells (40  $\mu$ g) were analysed by Western blot using the Diagenode antibody against JMJD2b (Cat. No. C15310104) diluted 1:1,000 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.



#### Figure 3. Immunofluorescence using the Diagenode antibody directed against JMJD2b

HeLa cells were stained with the Diagenode antibody against JMJD2b (Cat. No. C15310104) and with DAPI. Cells were fixed with 4% formaldehyde for 10' and blocked with PBS/TX-100 containing 5% normal goat serum and 1% BSA. The cells were immunofluorescently labelled with the JMJD2b antibody (left) diluted 1:200 in blocking solution followed by an anti-rabbit antibody conjugated to Alexa488. The middle panel shows staining of the nuclei with DAPI. A merge of the two stainings is shown on the right.

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