

### TECHNICAL DATASHEET

## JMJD6 polyclonal antibody - Classic

Other name: PTDSR, PTDSR1, PSR

Cat. No. C15410318	Specificity: Human, mouse: positive / Other species: not tested	
Type: Polyclonal Source: Rabbit	<b>Purity:</b> Affinity purified polyclonal antibody in PBS containing 0.02% azide and 50% glycerol.	
<b>Lot #:</b> 001 <b>Size:</b> 50 μg /50 μl	<b>Storage:</b> Store at -20°C; for long storage, store at -80°C Avoid multiple freeze-thaw cycles	
Concentration: 1 µg/µl	<b>Precautions:</b> This product is for research use only Not for use in diagnostic or therapeutic procedures	

**Description** : Polyclonal antibody raised in rabbit against human JMJD6 (Jumonji Domain Containing 6), using a recombinant protein.

### **Applications**

Applications	Suggested dilution/amount	Results
ChIP*	5 μg/ChIP	Fig 1
Western blotting	1:500	Fig 2
Immunohistochemistry	1:200	Fig 3

\* Please note that the optimal antibody amount per IP should be determined by the end-user. We recommend testing 1-5 µl per IP.

### Target description

JMJD6 (UniProt/Swiss-Prot entry Q6NYC1) can act both as a histone arginine demethylase and a lysyl-hydroxylase. As an arginine demethylase it is able to demethylate histone H3 at Arg2 (H3R2me) and histone H4 at Arg3 (H4R3me), thereby playing an important role in the histone code. JMJD6 can also catalyze the 5-hydroxylation on specific lysine residues of target proteins such as U2AF2/U2AF65 thereby acting as a regulator of RNA splicing. It is required for differentiation of multiple organs during embryogenesis and is a key regulator of hematopoietic differentiation.



## Figure 1. ChIP results obtained with the Diagenode antibody directed against JMJD6

ChIP assays were performed using HeLa cells, the Diagenode antibody against JMJD6 (Cat. No. C15410318) and optimized PCR primer sets for qPCR. ChIP was performed with the "iDeal ChIP-seq" kit (Cat. No. C01010055), using sheared chromatin from 4 million cells. A titration consisting of 1, 2 and 5  $\mu$ g of antibody per ChIP experiment was analyzed. IgG (2  $\mu$ g/IP) was used as a negative IP control. Quantitative PCR was performed with optimized primers for the SPI1 and SPOCD1, used as positive controls, and for the HBB promoter and the Sat2 satellite repeat, used as negative controls. Figure 1 shows the recovery, expressed as a % of input (the relative amount of immunoprecipitated DNA compared to input DNA after qPCR analysis).



# Figure 2. Western blot analysis using the Diagenode antibody directed against JMJD6

Whole protein extracts from mouse heart tissue were analysed by Western blot using the Diagenode antibody against JMJD6 (Cat. No. C15410318). The antibody was 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.



# Figure 3. Immunohistochemistry using the Diagenode antibody directed against JMJD6

Formalin fixed paraffin embedded mouse brain tissue was stained with the Diagenode antibody against JMJD6 (Cat. No. C15410318) diluted 1:200 followed by a peroxidase labelled goat anti-rabbit secondary antibody.

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