

## PHF8 polyclonal antibody

Cat. No. C15410336

Type: Polyclonal <b>ChIP grade</b>	Specificity: Human
Isotype: NA	Concentration: 0.2 µg/µl
Source: Rabbit	Purity: Affinity purified
Lot No.: A301-772A3	Storage: Store at 4°C
Size: 100 µl	Precautions: This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Last Data Sheet Update: November 8, 2016

### Description

Polyclonal antibody raised in rabbit against human PHF8 (PHD finger protein 8), using a synthetic peptide containing a sequence from the central part of the protein.

<sup>1</sup>Manufactured by Bethyl Laboratories, Inc., Texas, USA

### Applications

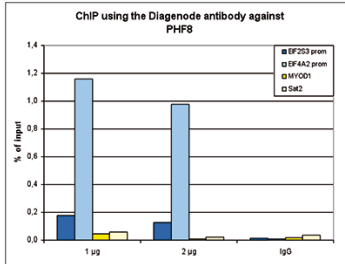
Applications	Suggested dilution	References
ChIP *	1-2 µg/ChIP	Fig 1
Western Blotting	1:1,000	Fig 2
IP	6 µg per IP	Fig 3

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

### Target Description

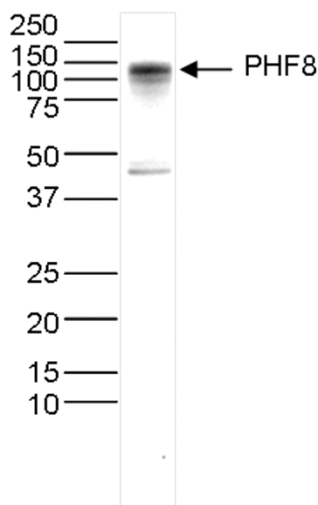
PHF8 (UniProtKB/Swiss-Prot entry Q9UPP1) is a jumonji domain containing protein which plays role in histone demethylation. PHF8 selectively demethylates the di- and monomethyl H3K9, H3K27 and H4K20 and acts as a transcriptional activator. It plays a key role cell cycle progression, rDNA transcription and brain development. Mutations in PHF8 lead to Siderius type X-linked mental retardation (MRXSSD), a mild to borderline type of mental retardation.

**Validation data**



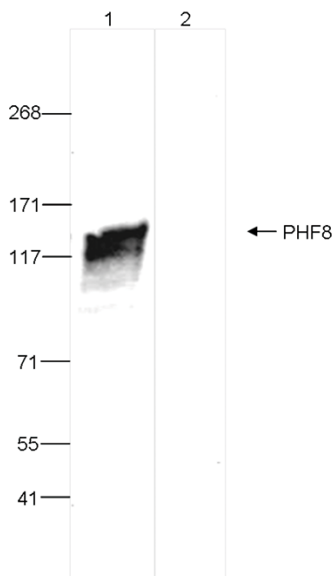
**Figure 1. ChIP results obtained with the Diagenode antibody directed against PHF8**

ChIP assays were performed using HeLa cells, the Diagenode antibody against PHF8 (cat. No. C15410336) 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 and 2 µg of antibody per ChIP experiment was analyzed. IgG (2 µg/IP) was used as a negative IP control. Quantitative PCR was performed with primers for the promoters of the EIF2S3 and EIF4A2 genes, used as positive controls, and for the MYO10 gene 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 PHF8**

Whole cell extracts from HeLa cells were analysed by Western blot using the Diagenode antibody against PHF8 (Cat. No. C15410336) 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. Immunoprecipitation analysis using the Diagenode antibody directed against PHF8**

Immunoprecipitation was performed on whole cell extracts from HeLa cells using 6 µg of the Diagenode antibody against PHF8 (Cat. No. C15410336, lane 1). An equal amount of rabbit IgG was used as a negative control (lane 2). The immunoprecipitated PHF8 protein was detected by western blot with the PHF8 antibody diluted 1:500.