diagenode
A Hologic Company

TECHNICAL DATASHEET

PHF8 antibody

Cat. No. C15410336

Type: Polyclonal **ChIP grade**
Isotype: NA
Source: Rabbit
Lot: A301-772A4
Size: 100 µl
Concentration: 0.2 µg/µl

Specificity: Human
Purity: Affinity purified
Storage: Store at 4°C

Precautions: This product is for research use only. Not for use in diagnostic or therapeutic procedures.

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.

Applications

Applications	Suggested dilution	References
ChIP*	1 - 2 µg per ChIP	Fig 1
Western blotting	1:1,000	Fig 2
Immunoprecipitation	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.

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Results

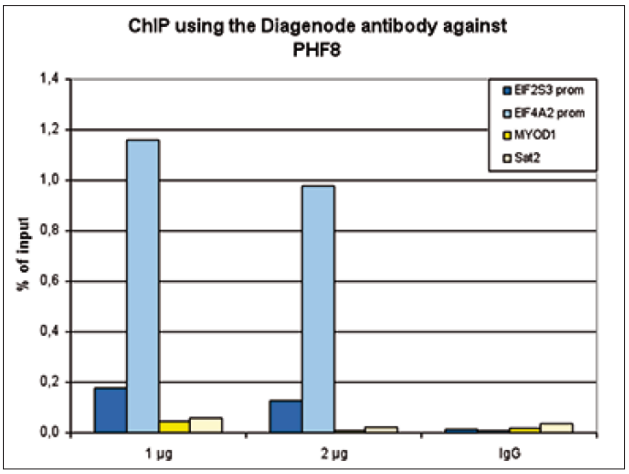

Figure 1. ChIP results obtained with the Diagenode antibody directed against PHF

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 MYOD1 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).

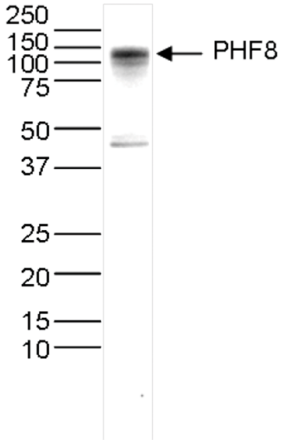

Figure 2. Western blot analysis using the Diagenode antibody directed against PHF

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.

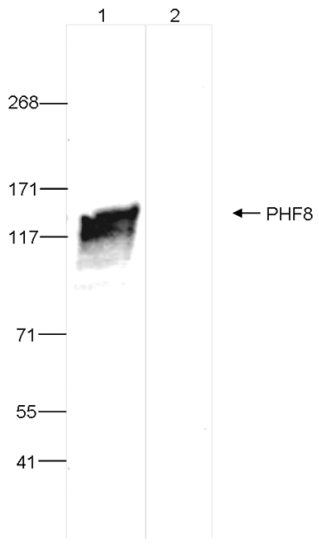

Figure 3. Immunoprecipitation analysis using the Diagenode antibody directed against PHF8

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.