



TECHNICAL DATASHEET

CXXC1 polyclonal antibody - Classic

Other name: CFP1, CGBP, PCCX1, PHF18, SPP1, ZCGPC1

Cat. No. C15410315

Type: Polyclonal ChIP-grade / ChIP-seq-grade

Source: Rabbit Lot #: 001

Size: 50 μg /50 μl **Concentration:** 1 μg/μl

Specificity: Human: positive / Other species: not tested **Purity:** Affinity purified polyclonal antibody in PBS containing

0.02% azide and 50% glycerol.

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

Description: Polyclonal antibody raised in rabbit against human CXXC1 (CXXC Finger Protein 1), using a recombinant protein.

Applications

Applications	Suggested dilution/amount	Results
ChIP*	2 μg/ChIP	Fig 1, 2
Western blotting	1:1,000	Fig 3
IF	1:100	Fig 4

^{*} 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

CXXC1 (UniProt/Swiss-Prot entry Q9POU4) is a transcriptional activator that specifically recognizes unmethylated CpG motifs in DNA with a preference for CpGG. The protein contains a CXXC motif in it's DNA-binding domain.

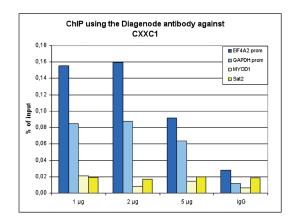


Figure 1. ChIP results obtained with the Diagenode antibody directed against ${\tt CXXC1}$

ChIP assays were performed using HeLa cells, the Diagenode antibody against CXXC1 (Cat. No. C15410315) 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 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 active EIF4A2 and GAPDH promoters, used as positive controls, and for the inactive 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).

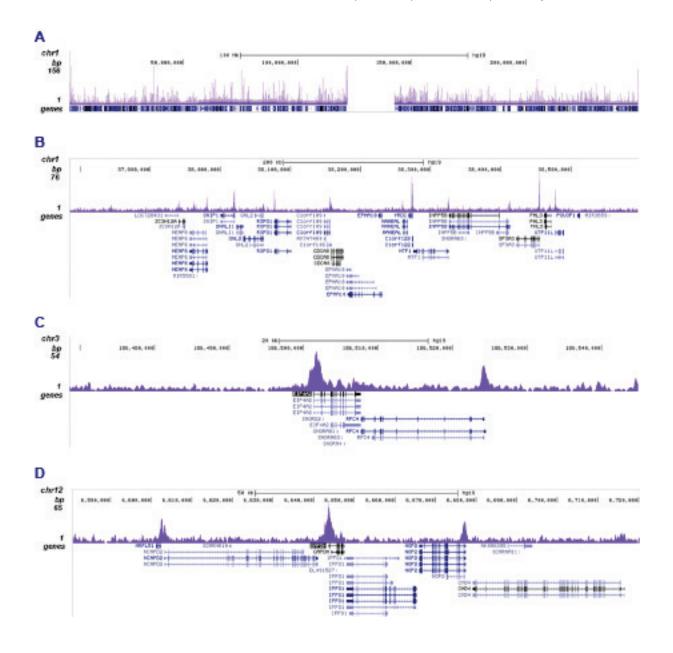


Figure 2. ChIP-seq results obtained with the Diagenode antibody directed against CXXC1

ChIP was performed on sheared chromatin from 4,000,000 HeLa cells using 2 µg of the Diagenode antibody against CXXC1 (Cat. No. C15410315) as described above. The IP'd DNA was subsequently analysed on an Illumina HiSeq 2000. Library preparation, cluster generation and sequencing were performed according to the manufacturer's instructions. The 50 bp tags were aligned to the human genome using the BWA algorithm. Figure 2 shows the peak distribution along the complete sequence and an 800 kb region of chromosome 1 (figure 2A and B) and in two regions surrounding the EIF4A2 and GAPDH positive control genes, respectively (figure 2C and D).

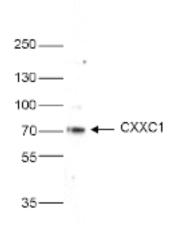


Figure 3. Western blot analysis using the Diagenode antibody directed against ${\tt CXXC1}$

Whole cell extracts from HeLa cells were analysed by Western blot using the Diagenode antibody against CXXC1 (Cat. No. C15410315). The antibody was 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.

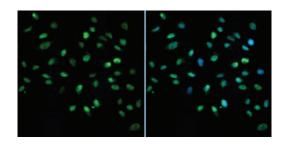


Figure 4. Immunofluorescence using the Diagenode antibody directed against CXXC1

A549 cells were stained with the Diagenode antibody against CXXC1 (Cat. No. C15410315) diluted 1:100. The right picture shows costaining with DAPI.

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