

FOXM1 polyclonal antibody - Classic

Cat. No. C15410232

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

Source: Rabbit

Lot #: 39435

Size: 25 µl/100 µl

Concentration: 1 µg/µl

Specificity: Human: positive

Other species: not tested

Purity: Affinity purified polyclonal antibody in PBS containing 1% BSA, 20% glycerol and 0.01% thimerosal.

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 FOXM1 (Forkhead Box M1), using a KLH-conjugated synthetic peptide containing an amino acid sequence from the C-terminal part of the protein.

Applications

	Suggested dilution/amount	Results
ChIP*	2 µg per ChIP	Fig 1, 2
Western blot	1:1,000-1:10,000	Fig 3
Immunohistochemistry	1:100-1:1,000	Fig 4

*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

FOXM1 (UniProt/Swiss-Prot entry Q08050) is a transcription factor which is involved in cell proliferation. It regulates the expression of cell cycle genes essential for DNA replication and mitosis such as cyclin B1 and cyclin A2. It may also play a role in DNA breaks repair participating in the DNA damage checkpoint response.

Results

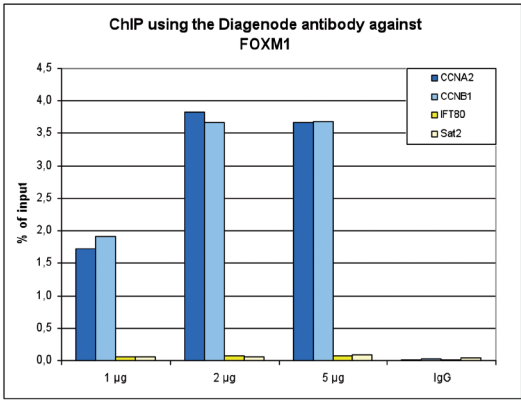


Figure 1. ChIP results obtained with the Diagenode antibody directed against FOXM1

ChIP assays were performed using HeLa cells, the Diagenode antibody against FOXM1 [Cat. No. C15410232] and optimized 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 of the antibody consisting of 1, 2 and 5 µg per ChIP experiment was analysed. IgG (1 µg/IP) was used as negative IP control. QPCR was performed with primers for the promoters of the CCNA2 and CCNB1 genes, used as positive controls, and for the IFT80 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).

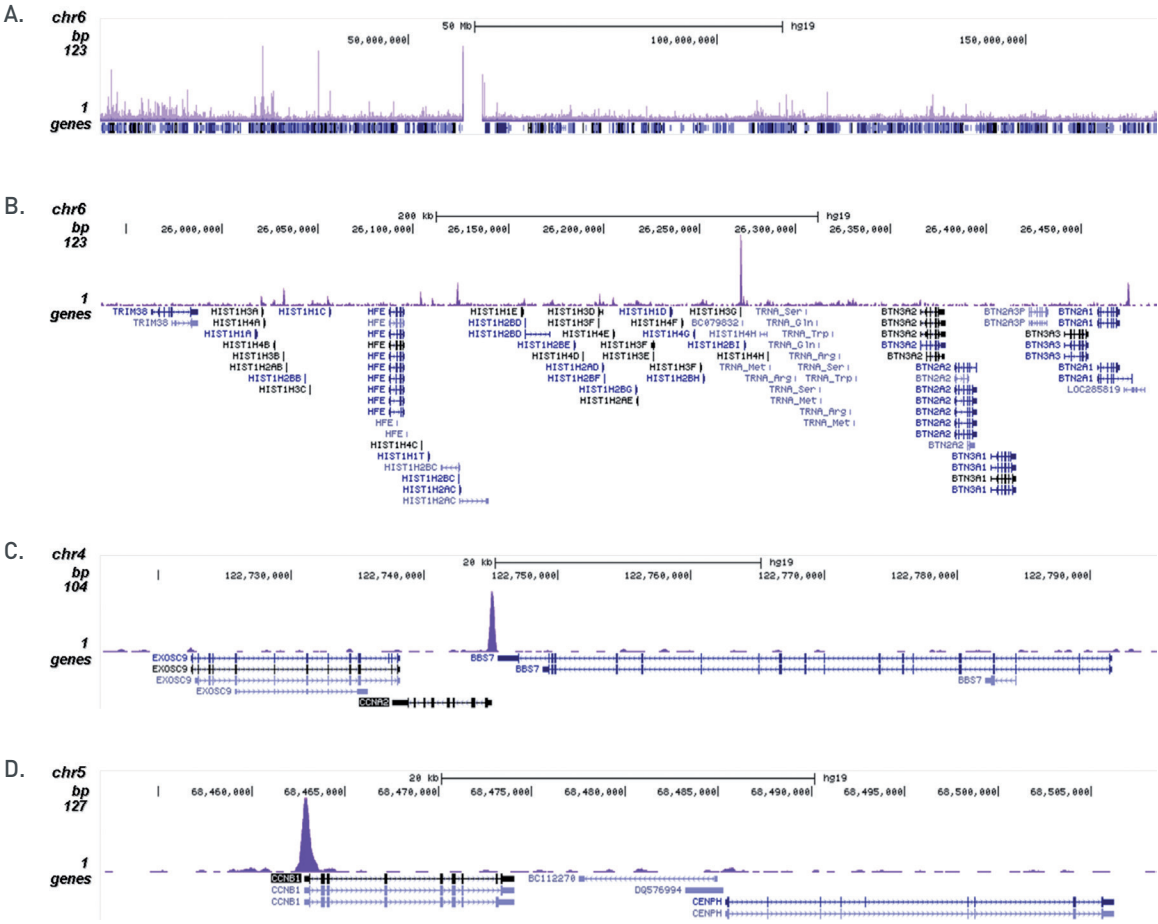


Figure 2. ChIP-seq results obtained with the Diagenode antibody directed against FOXM1

ChIP was performed on sheared chromatin from 4 million HeLa cells using 2 µg of the Diagenode antibody against FOXM1 [Cat. No. C15410232] as described above. The IP’d DNA was subsequently analysed on an Illumina HiSeq. 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 enrichment along the complete sequence and a 600 kb region of human chromosome 6 (fig 2A and B), and in two genomic regions surrounding the CCNA2 and CCNB1 positive control genes (fig 2C and D).

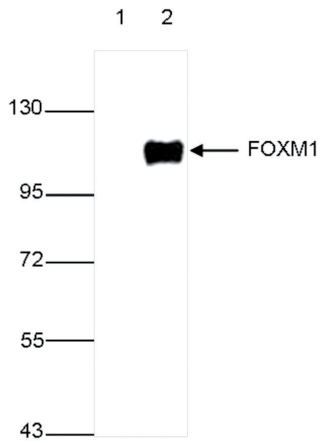


Figure 3. Western blot analysis using the Diagenode antibody directed against FOXM1

Whole cell extracts from 293T (30 µg, lane 1) or 293T cells transfected with a FOXM1 expression vector (lane 2) were analysed by Western blot using the Diagenode antibody against FOXM1 (Cat. No. C15410232) diluted 1:5,000. The position of the protein of interest is indicated on the right; the marker (in kDa) is shown on the left.

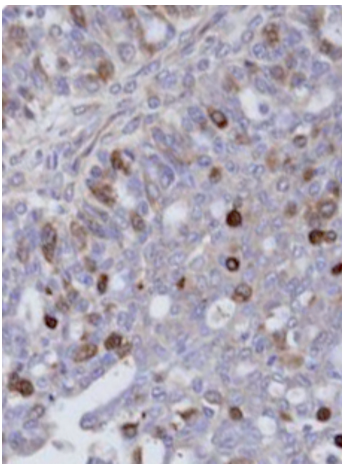


Figure 4. Immunohistochemistry using the Diagenode antibody directed against FOXM1

Formalin fixed paraffin embedded human ovarian cancer tissue was stained with the Diagenode antibody against FOXM1 [Cat. No. C15410232] diluted 1:100 followed by a peroxidase labelled goat anti-rabbit secondary antibody.

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