diagenode
A Hologic Company

TECHNICAL DATASHEET

NCOR1 Antibody - ChIP-seq Grade

Cat. No. C15410341

Type: Polyclonal	Specificity: Human: positive. Other species: not tested.
Size: 100 µl	Isotype: NA
Concentration: 0.2 µg/µl	Host: Rabbit
Lot No.: A301-145A3	Purity: Affinity purified polyclonal antibody.
Storage buffer: TBS containing 0.1% BSA and 0.09% azide.	Storage conditions: Store at 4°C.
Precautions: This product is for research use only. Not for use in diagnostic or therapeutic procedures.	

Last Data Sheet Update: December 2, 2020

Description

Other names: NCoR, TRAC1, PPP1R109

Polyclonal antibody raised in rabbit against human **NCOR1 (Nuclear Receptor Corepressor 1)**, using a synthetic peptide containing a sequence from the central part of the protein[1].

Applications

Applications	Suggested dilution	References
ChIP/ChIP-seq *	2 µg/ChIP	Fig 1, 2
Western Blotting	1:5,000	Fig 3
IP	6 µg per IP	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.

[1]Manufactured by Bethyl Laboratories, Inc., Texas, USA

Target Description

NCOR1 (UniProtKB/Swiss-Prot entry O75376) mediates transcriptional repression of thyroid-hormone and retinoic-acid receptors by promoting chromatin condensation and preventing access of the transcription machinery. NCOR1 is part of a complex which may impede the access of basal transcription factors.by promoting histone deacetylation and the formation of repressive chromatin structures.

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Validation data

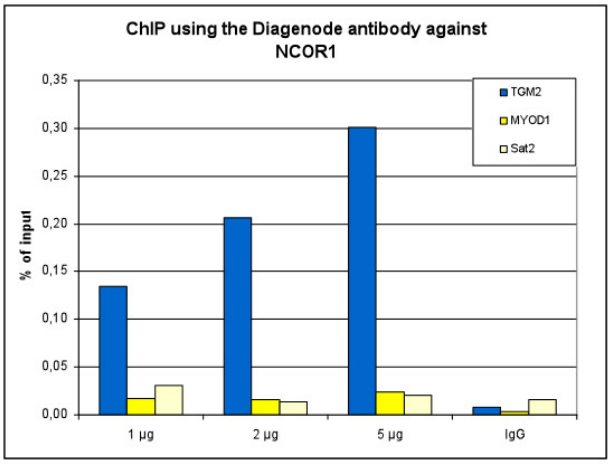

Figure 1. ChIP results obtained with the Diagenode antibody directed against NCOR1

ChIP assays were performed using K562 cells, the Diagenode antibody against NCOR1 (Cat. No. C15410341) 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 TGM2 gene, used as positive control, and for the MYOD1 gene and 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).

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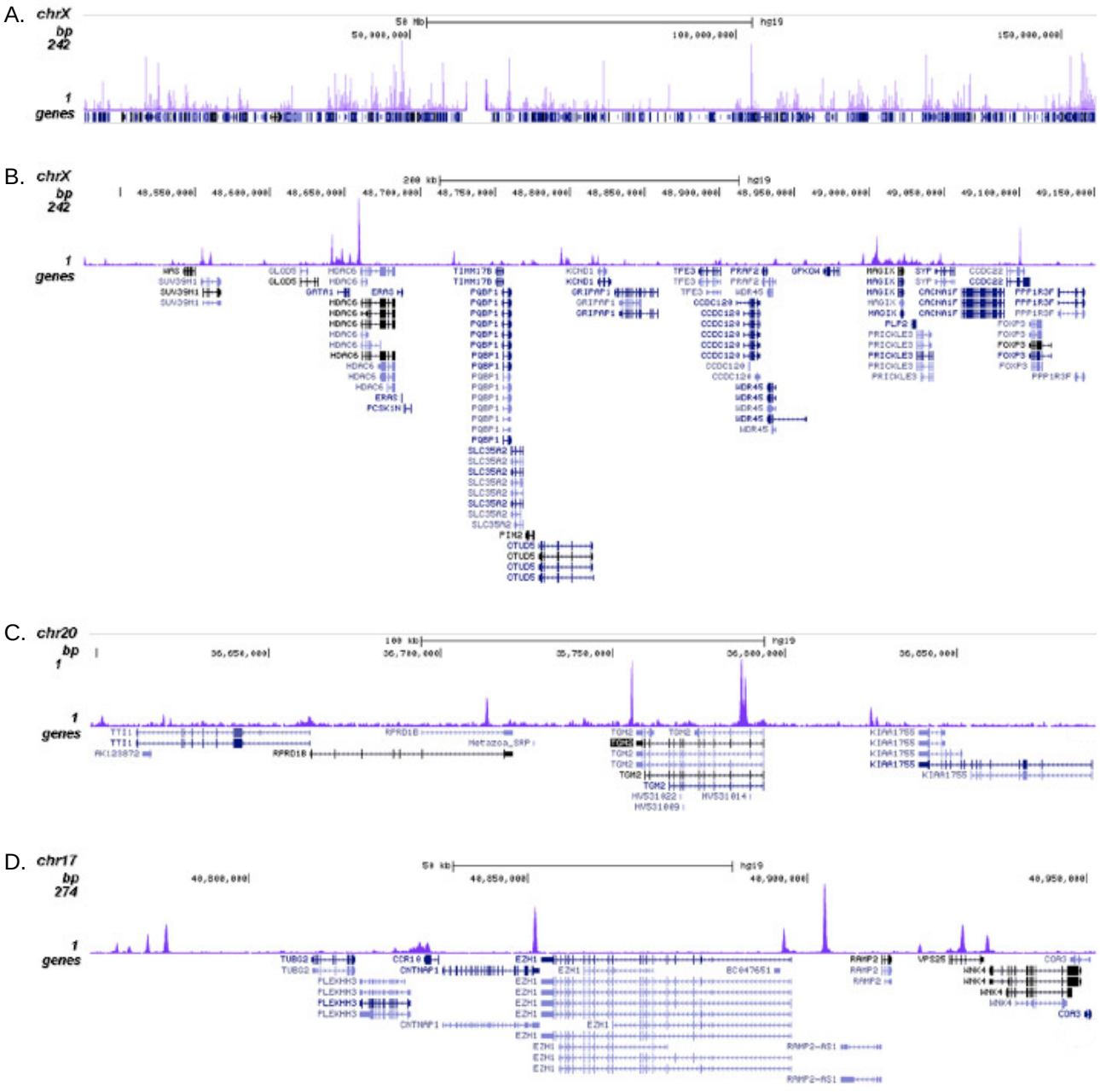

Figure 2. ChIP-seq results obtained with the Diagenode antibody directed against NCOR1

ChIP was performed on sheared chromatin from 4 million K562 cells using 2 µg of the Diagenode antibody against NCOR1 (Cat. No. C15410341) 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 the human X-chromosome (fig 2A and B), and in two genomic regions surrounding the TGM2 positive control genes on chromosome 20 (fig 2C) and the EZH1 gene on chromosome 17 (fig 2D).

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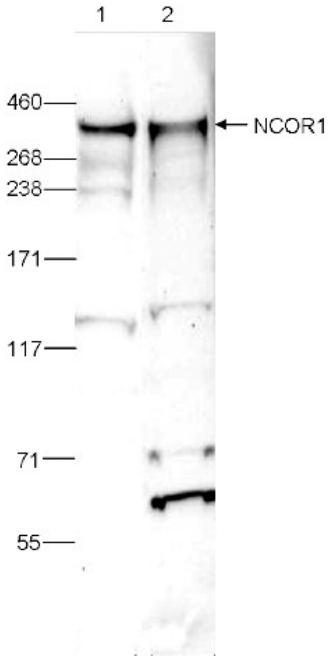

Figure 3. Western blot analysis using the Diagenode antibody directed against NCOR1

Whole cell extracts from HeLa (lane 1) and 3T3 cells (lane 2) were analysed by Western blot using the Diagenode antibody against NCOR1 (Cat. No. C15410341) diluted 1:5,000 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.

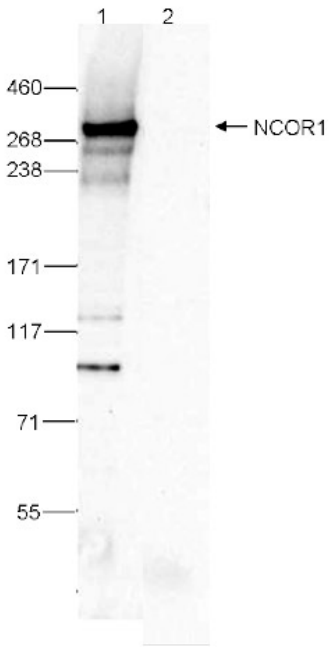

Figure 4. Immunoprecipitation using the Diagenode antibody directed against NCOR1

Immunoprecipitation was performed on whole cell extracts from HeLa cells using 6 µg of the Diagenode antibody against NCOR1 (Cat. No. C15410341, lane 1). An equal amount of rabbit IgG was used as a negative control (lane 2). The immunoprecipitated NCOR1 protein was detected by western blot with the NCOR1 antibody diluted 1:200.

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