diagenode
Innovating Epigenetic Solutions

SMARCB1 polyclonal antibody - Classic

Other name: SNF5L1, INI1, BAF47, SNF5, MRD15, RDT, RTPS1, SWNTS1, SFH1, SNF1, SNFS

Cat. No. C15410317

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 SMARCB1 (SWI/SNF Related, Matrix Associated, Actin Dependent Regulator Of Chromatin, Subfamily B, Member 1), using a recombinant protein.

Applications

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

SMARCB1 (UniProt/Swiss-Prot entry Q12824) is part of the BAF (hSWI/SNF) complex which relieves the repressive state of chromatin, allowing the transcriptional machinery to access its targets. It plays an important role in cell proliferation and differentiation and in cellular antiviral activities. SMARCB1 also has been found to act as a tumor suppressor and mutations in it have been associated with malignant rhabdoid tumors.

Results

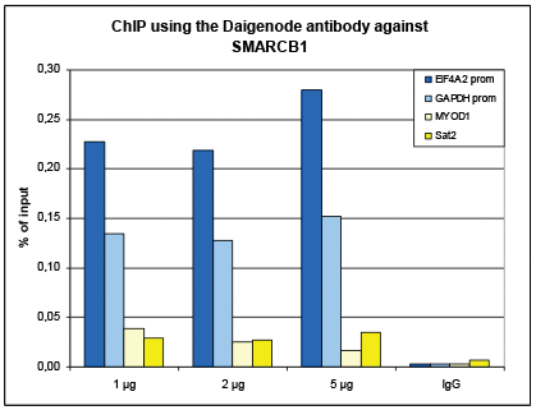

Figure 1. ChIP results obtained with the Diagenode antibody directed against SMARCB1

ChIP assays were performed using HeLa cells, the Diagenode antibody against SMARCB1 (Cat. No. C15410317) 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 optimized primers for the GAPDH and EIF4A2 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).

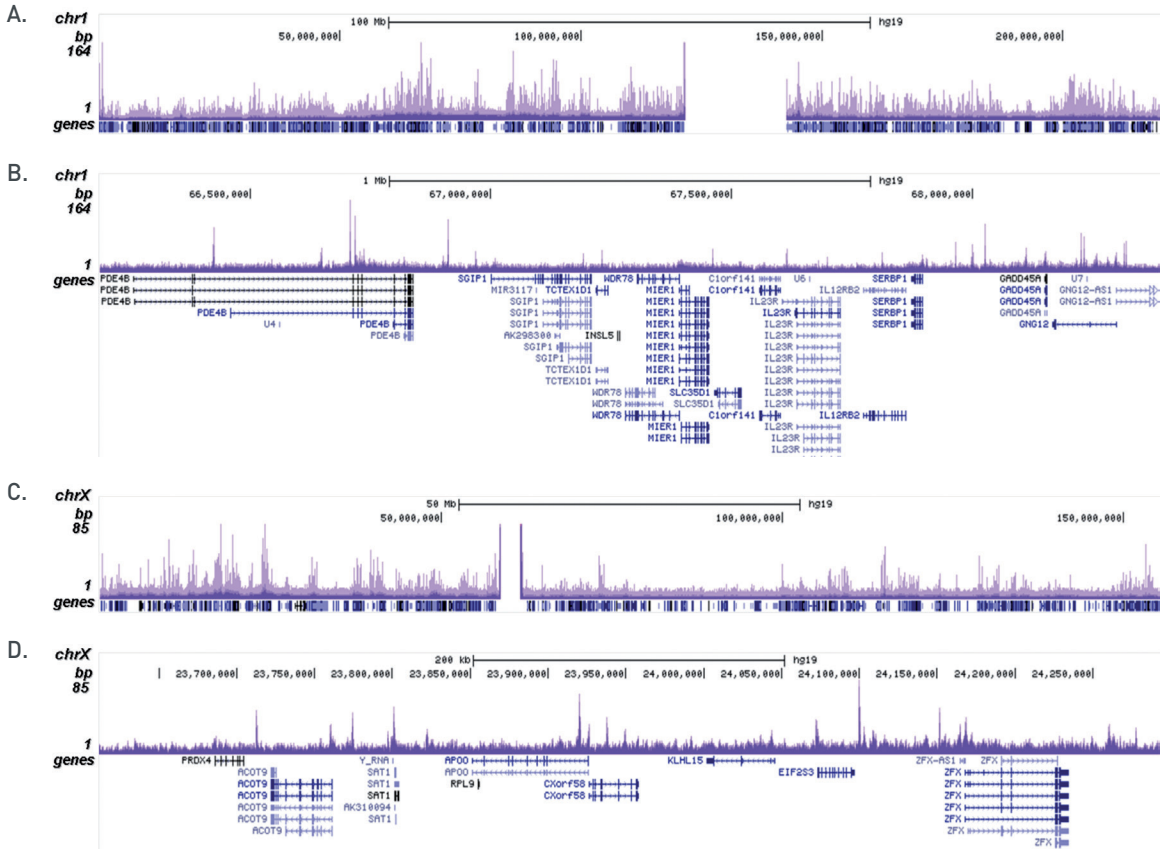

Figure 2. ChIP-seq results obtained with the Diagenode antibody directed against SMARCB1

ChIP was performed on sheared chromatin from 4 million HeLa cells using 2 µg of the Diagenode antibody against SMARCB1 (Cat. No. C15410317) 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 2 Mb region of human chromosome 1 (fig 2A and B), and along the complete sequence and a 600 kb region of the human X chromosome (fig 2C and D).

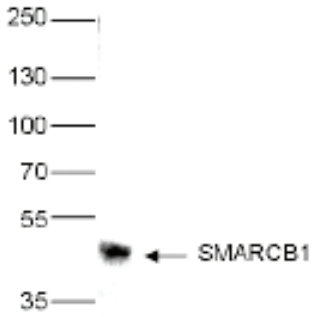

Figure 3. Western blot analysis using the Diagenode antibody directed against SMARCB1

Whole cell extracts from HeLa cells were analysed by Western blot using the Diagenode antibody against SMARCB1 (Cat. No. C15410317). 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.

Diagenode sa. BELGIUM | EUROPE

LIEGE SCIENCE PARK
Rue Bois Saint-Jean, 3
4102 Seraing (Ougrée) - Belgium
Tel: +32 4 364 20 50
Fax: +32 4 364 20 51
orders@diagenode.com
info@diagenode.com

Diagenode Inc. USA | NORTH AMERICA

400 Morris Avenue, Suite 101
Denville, NJ 07834 - USA
Tel: +1 862 209-4680
Fax: +1 862 209-4681
orders.na@diagenode.com
info.na@diagenode.com

Last update: May 22, 2015