

Other name: E2F-6



### TECHNICAL DATASHEET

## E2F6 polyclonal antibody - Classic

Cat. No. C15410314	Specificity: Human: positive / Other species: not tested	
Type: Polyclonal ChIP-grade / ChIP-seq-grade Source: Rabbit	<b>Purity:</b> Affinity purified polyclonal antibody in PBS containing 0.02% azide and 50% glycerol.	
Lot <b>#:</b> 001 Size: 50 μg /50 μl Concentration: 1 μg/μl	<b>Storage:</b> Store at -20°C; for long storage, store at -80°C Avoid multiple freeze-thaw cycles	
	<b>Precautions:</b> This product is for research use only Not for use in diagnostic or therapeutic procedures	

**Description** : Polyclonal antibody raised in rabbit against human E2F6 (E2F Transcription Factor 6), using a recombinant protein.

### Applications

Applications	Suggested dilution/amount	Results
ChIP*	5μg/ChIP	Fig 1, 2
Western blotting	1:500	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

E2F6 (UniProt/Swiss-Prot entry 075461) is a member of the E2F family of transcription factors. It lacks the transcriptional activation and tumor suppressor protein association domains found in other family members but contains a modular suppression domain that functions as a transcriptional inhibitor. E2F6 plays a crucial role in the control of the cell cycle as it regulates a subset of E2F-dependent genes required for entry into the cell cycle but not for normal cell cycle progression. Overexpression of E2F6 delays the exit of cells from the S-phase.



# Figure 1. ChIP results obtained with the Diagenode antibody directed against E2F6

ChIP assays were performed using HeLa cells, the Diagenode antibody against E2F6 (Cat. No. C15410314) 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  $\mu$ g of antibody per ChIP experiment was analyzed. IgG (2  $\mu$ g/IP) was used as a negative IP control. Quantitative PCR was performed with primers for the BRCA1, CBX5 and RBBP8 promoters, used as positive controls, and for the Sat2 satellite repeat, used as a negative control. 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 E2F6

ChIP was performed on sheared chromatin from 4,000,000 HeLa cells using 5 µg of the Diagenode antibody against E2F6 (Cat. No. C15410314) 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 a 400 kb region of chromosome 1 (figure 2A and B) and in two regions surrounding the BRCA1 and CBX5 positive control genes, respectively (figure 2C and D).



## Figure 3. Western blot analysis using the Diagenode antibody directed against E2F6

Whole cell extracts from Jurkat, HeLa and HepG2 cells (lane 1, 2 and 3, respectively) were analysed by Western blot using the Diagenode antibody against E2F6 (Cat. No. C15410314) diluted 1:500. 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 E2F6

HeLa cells were stained with the Diagenode antibody against E2F6 (Cat. C15410314) diluted 1:100.

#### 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