

## PPAR $\gamma$ polyclonal antibody

**Cat. No. C15410367**

Type: Polyclonal	Specificity: Human: positive. Other species: not tested.
Size: 50 $\mu$ g	Isotype: NA
Concentration: 1.9 $\mu$ g/ $\mu$ l	Host: Rabbit
Lot No.: A2896-0014P	Purity: Affinity purified polyclonal antibody.
Storage buffer: PBS containing 0.05% azide.	Storage conditions: 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.	

Last Data Sheet Update: March 13, 2020

### Description

**Other names:** PPAR-gamma, NR1C3

Polyclonal antibody raised in rabbit against human PPAR $\gamma$  ((peroxisome proliferator-activated receptor gamma), using two KLH-conjugated synthetic peptides from the central and the N-terminal part of the protein, respectively.

### Applications

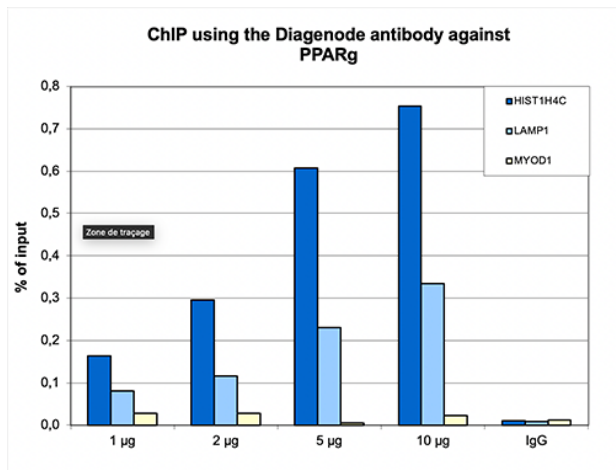
Applications	Suggested dilution	References
ChIP *	5 $\mu$ g/ChIP	Fig 1, 2
ELISA	1:10,000	Fig 3
Western blotting	not recommended	

\*Please note that the optimal antibody amount per IP should be determined by the end-user. We recommend testing 1-10  $\mu$ g per IP.

### Target Description

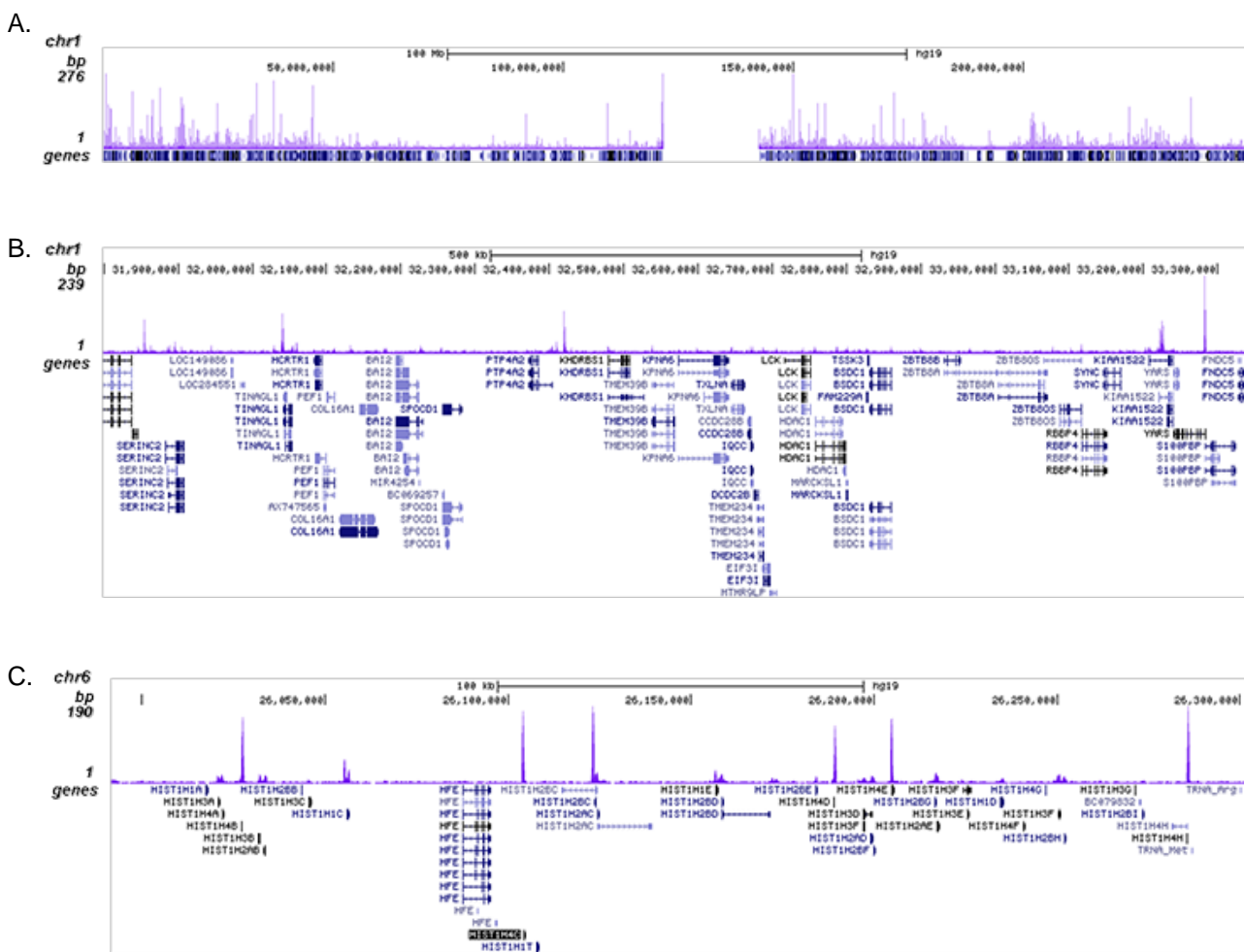
PPARG (UniProtKB/Swiss-Prot entry P37231) is a nuclear hormone receptor which binds peroxisome proliferators such as hypolipidemic drugs and fatty acids. Like many other nuclear hormone receptors, PPARG forms a heterodimer with the retinoid X receptor (RXR) leading to transcriptional regulation of various genes including acyl-CoA oxidase and cytochrome P450 A6. PPARG has been implicated in adipocyte differentiation and glucose homeostasis and in various diseases such as obesity, diabetes, atherosclerosis and cancer.

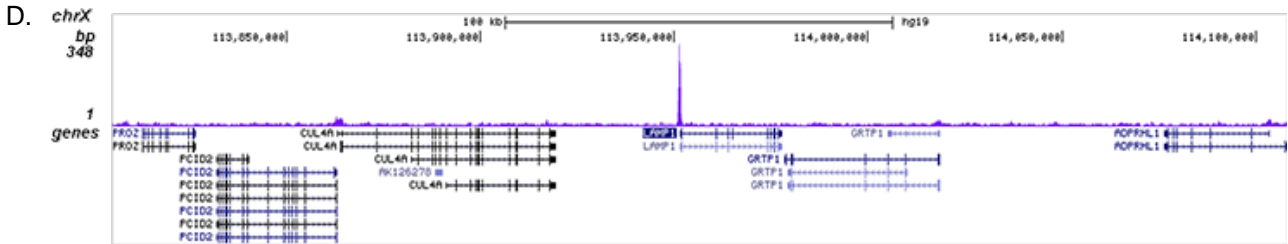
Validation data



**ChIP results obtained with the Diagenode antibody directed against PPARg**

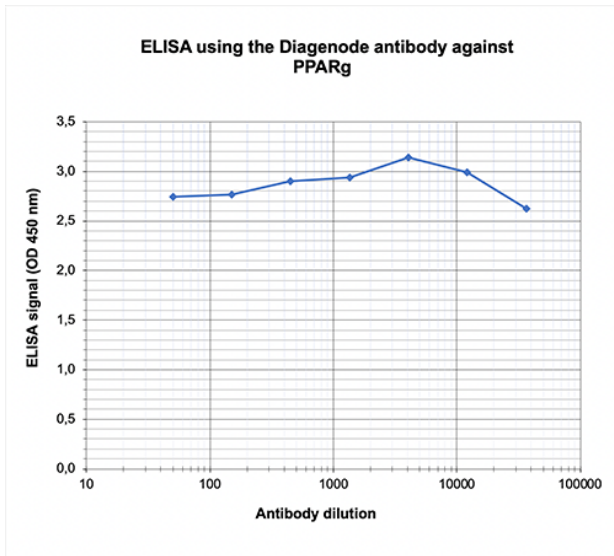
ChIP was performed with the Diagenode antibody against PPARg (Cat. No. C15410367) on sheared chromatin from 4,000,000 Capan2 cells with the iDeal ChIP-seq kit for TF's. An antibody titration consisting of 1, 2, 5 and 10 µg per ChIP experiment was analysed. IgG (2 µg/IP) was used as negative IP control. QPCR was performed with primers specific for the HIST1H4C and LAMP1 genes, used as positive controls, and for the MYOD1 gene, used as 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).





**ChIP-seq results obtained with the Diagenode antibody directed against PPARγ**

ChIP was performed on sheared chromatin from 4,000,000 Capan2 cells using 5 µg of the Diagenode antibody against PPARγ (Cat. No. C15410367) as described above. The IP'd DNA was subsequently analysed on an Illumina NovaSeq. 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 1.5 Mb region of chromosome 1 (figure 2A and B), in a genomic region of chromosome 6 containing several HIST1 genes (figure 2C), and in a genomic region of the X-chromosome surrounding the LAMP1 positive control gene (figure 2D).



**Determination of the antibody titer**

To determine the titer of the antibody, an ELISA was performed using a serial dilution of Diagenode antibody directed against PPARγ (Cat. No. C15410367). The plates were coated with the peptides used for immunization of the rabbit. By plotting the absorbance against the antibody dilution (Figure 3), the titer of the antibody was estimated to be >1:1,000,000.