

ZMYM3 monoclonal antibody - Classic

Cat. No. C15200016

Type: Monoclonal	Specificity: Human
Isotype: NA	Concentration: 2.07 µg/µl
Source: Mouse	Purity: Protein A purified monoclonal antibody in PBS containing 0.05% azide.
Lot No.: 001	Storage: Store at -20°C; for long storage, store at -80°C. Avoid multiple freeze-thaw cycles.
Size: 50 µg/ 24 µl	Precautions: This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Description

Monoclonal antibody raised in mouse against human ZMYM3 (Zinc Finger, MYM-Type 3), using the full length recombinant protein.

Applications

Applications	Suggested dilution	References
ChIP*	1-2 µg/ChIP	Fig 1, 2
Protein array	1:100,000	Fig 3
IF	1:1,000	Fig 4

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

Target Description

Monoclonal antibody raised in mouse against human ZMYM3 (Zinc Finger, MYM-Type 3), using the full length recombinant protein.

Validation Data

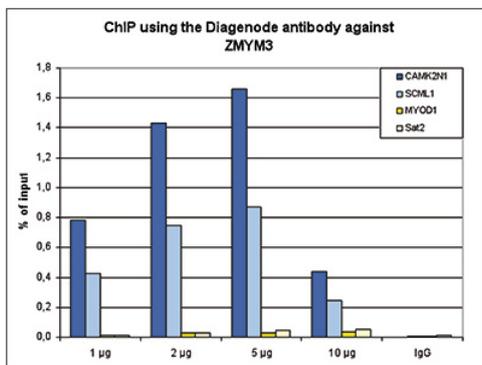


Figure 1. ChIP results obtained with the Diagenode monoclonal antibody directed against ZMYM3

ChIP was performed using HepG2 cells, the Diagenode monoclonal antibody against ZMYM3 (Cat. No. C15200016) 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 of the antibody consisting of 1, 2, 5 and 10 µg per ChIP experiment was analysed. IgG (2 µg/IP) was used as negative IP control. Quantitative PCR was performed with primers near the CAMK2N1 and SCML1 promoters, used as positive controls, and for the 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).

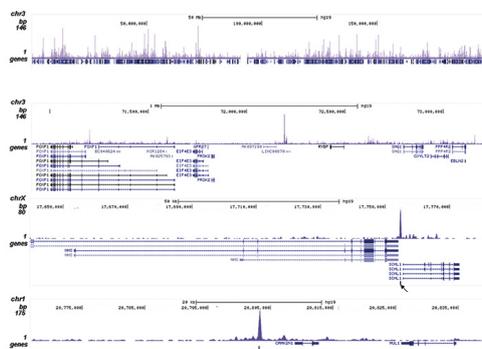


Figure 2. ChIP-seq results obtained with the Diagenode monoclonal antibody directed against ZMYM3

ChIP was performed with 1 µg of the Diagenode antibody against ZMYM3 (Cat. No. C15200016) on sheared chromatin from 4 million HepG2 cells 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 2 Mb region of chromosome 3 (figure 2A and B) and in two regions surrounding the SCML1 and CAMK2N1 positive control genes (figure 2C and D). The position of the amplicon used for ChIP-qPCR is indicated by an arrow.

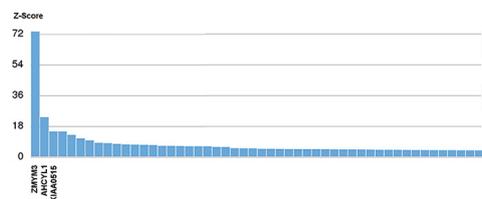


Figure 3. Protein array analysis with the Diagenode antibody directed against ZMYM3

The specificity of the Diagenode antibody against ZMYM3 (Cat. No. C15200016) was demonstrated using the HuProt human protein microarray (CDI Laboratories), a protein array containing more than 19,000 human proteins. The antibody was used at a dilution of 1:100,000. Figure 4 shows the Z-score of the signal intensity (mean value of the duplicate spots on the array). The names of the proteins with 3 highest Z-scores are indicated at the bottom. This figure clearly shows the high specificity of the antibody for ZMYM3.

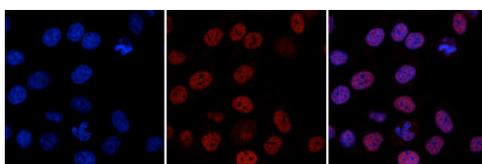


Figure 4. Immunofluorescence using the Diagenode monoclonal antibody directed against ZMYM3

HeLa cells were stained with the Diagenode monoclonal antibody against ZMYM3 (cat. No. C15200016) and with DAPI. Cells were fixed with 4% formaldehyde for 10' and blocked with PBS/TX-100 containing 1% BSA. The cells were immunofluorescently labeled with the ZMYM3 antibody (middle) diluted 1:1.000 in blocking solution followed by an anti-mouse antibody conjugated to Alexa594. The left panel shows staining of the nuclei with DAPI. A merge of the two stainings is shown on the right.