

Histone H3K4me2 (Di-methyl Lys4) antibody - ChIP grade

Cat. No. GTX60819

Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Application	WB, ICC/IF, Dot, ELISA, ChIP assay
Reactivity	Human, Arabidopsis thaliana

Package
50 µg

APPLICATION

Application Note

*Optimal dilutions/concentrations should be determined by the researcher.

Suggested dilution	Recommended dilution
WB	1:1,000
ICC/IF	1:5,000
Dot	1:20,000
ELISA	1:500
ChIP assay	0.5-5 µg

Not tested in other applications.

PROPERTIES

Form	Liquid
Buffer	PBS
Preservative	0.05% Sodium azide, 0.05% ProClin 300
Storage	Store as concentrated solution. Centrifuge briefly prior to opening vial. For short-term storage (1-2 weeks), store at 4°C. For long-term storage, aliquot and store at -20°C or below. Avoid multiple freeze-thaw cycles.
Concentration	1.2 mg/ml (Please refer to the vial label for the specific concentration.)
Immunogen	Histone H3 containing the dimethylated lysine 4 (H3K4me2), using a KLH-conjugated synthetic peptide.
Purification	Purified by affinity chromatography
Conjugation	Unconjugated

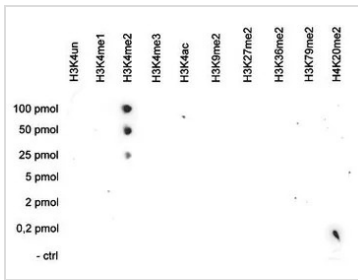
Note

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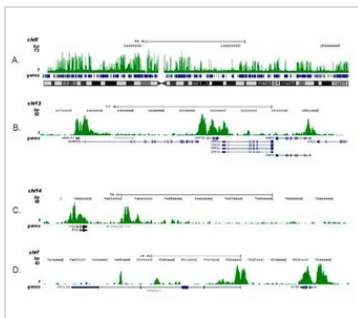


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DATA IMAGES

GTX60819 Dot Image

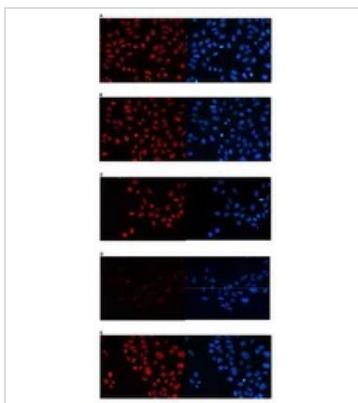
Dot blot analysis of 0.2 - 100 pmol of the peptides containing other modifications of histone H3 and H4 and the unmodified H3K4 sequence using GTX60819 Histone H3K4me2 (Di-methyl Lys4) antibody - ChIP grade.

Dilution : 1:20,000


GTX60819 ChIP assay Image

ChIP analysis of sheared chromatin from 5×10^5 HeLaS3 cells using GTX60819 Histone H3K4me2 (Di-methyl Lys4) antibody - ChIP grade. The IP'd DNA was analysed on an Illumina Genome Analyzer. Library preparation, cluster generation and sequencing were performed according to the manufacturer's instructions. The 36 bp tags were aligned to the human genome using the ELAND algorithm. Figure 2 shows the peak distribution along the complete X-chromosome (figure 2A) and in 3 chromosomal regions surrounding the GAPDH, c-fos and ACTB genes (figure 2B, C and D, respectively).

Antibody amount : 1 μ g

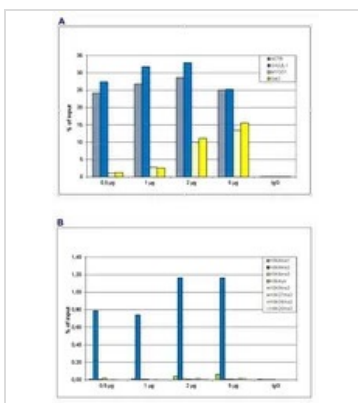

GTX60819 ICC/IF Image

ICC/IF analysis of 4% paraformaldehyde fixed U2OS cells using GTX60819 Histone H3K4me2 (Di-methyl Lys4) antibody - ChIP grade. Staining of the cells with the H3K4me2 antibody after incubation of the antibody with 5 ng/ μ l blocking peptide containing the unmodified and the mono-, di- and trimethylated H3K4 (Figure B, C, D, respectively).

Red : Primary antibody

Blue : DAPI

Dilution : 1:5000


GTX60819 ChIP assay Image

ChIP analysis of sheared chromatin from 5×10^5 HeLaS3 cells using GTX60819 Histone H3K4me2 (Di-methyl Lys4) antibody - ChIP grade. A titration of the antibody consisting of 0.5, 1, 2 and 5 μ g per ChIP experiment was analysed. IgG (2 μ g/IP) was used as negative IP control. Figure 1A. Quantitative PCR was performed with primers for a region upstream of the ACTB and GAS2L1 promoters, used as positive controls, and for the MYOD1 gene and the Sat2 satellite repeat, used as negative controls. The graph shows the recovery, expressed as a % of input (the relative amount of immunoprecipitated DNA compared to input DNA after qPCR analysis). Figure 1B. Recovery of the nucleosomes carrying the H3K4me1, H3K4me2, H3K4me3, H3K9me2, H3K27me2, H3K36me2, H4K20me2 and the unmodified H3K4 as determined by qPCR. The figure clearly shows the antibody is very specific in ChIP for the H3K4me2 modification.



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