Histone H3K27me3 (Tri-methyl Lys27) antibody - ChIP grade

Cat. No. GTX60816

| Host | Rabbit |
|--------------|---|
| Clonality | Polyclonal |
| lsotype | IgG |
| Applications | WB, ICC/IF, Dot, ELISA, ChIP assay |
| Reactivity | Human, Mouse, Drosophila, Arabidopsis thaliana, Caenorhabditis elegans, Zea mays, Tomato, Poplar, Daphnia, Cyanidioschyzon merolae |

Package 50 μg

Applications

Application Note

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

| Suggested dilution | Recommended dilution |
|--------------------|----------------------|
| WB | 1:1,000 |
| ICC/IF | 1:200 |
| Dot | 1:5,000 |
| ELISA | 1:100 - 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 | 1.1 mg/ml (Please refer to the vial label for the specific concentration.) |
| Immunogen | The region of histone H3 containing the trimethylated lysine 27 (H3K27me3), using a KLH-conjugated synthetic peptide. |
| Purification | Purified by affinity chromatography |
| Conjugation | Unconjugated |
| Note | For laboratory research use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption. |
| | Purchasers shall not, and agree not to enable third parties to, analyze, copy, reverse engineer or otherwise attempt to determine the structure or sequence of the product. |
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DATA IMAGES



GTX60816 ChIP assay Image

ChIP analysis of sheared chromatin from 10^6 HeLa cells using GTX60816 Histone H3K27me3 (Tri-methyl Lys27) antibody - ChIP grade. A titration consisting of 0.5, 1, 2 and 5 µg of antibody per ChIP experiment was analyzed. IgG (1 µg/IP) was used as a negative IP control. Figure 1A. Quantitative PCR was performed with primers specific for the promoter of the active GAPDH and EIF4A2 genes, used as negative controls, and for the inactive TSH2B and MYT1 genes, used as positive 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 H3K27me1, H3K27me2, H3K27me3, H3K4me3, H3K9me3 and H3K36me3 modifications and the unmodified H3K27 as determined by qPCR. The figure clearly shows the antibody is very specific in ChIP for the H3K27me3 modification.



GTX60816 ChIP assay Image

ChIP analysis of sheared chromatin from 10⁶ HeLa cells using GTX60816 Histone H3K27me3 (Tri-methyl Lys27) antibody - ChIP grade. 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 in genomic regions of chromosome 6 and 20, surrounding the TSH2B and MYT1 positive control genes (fig 2A and 2B, respectively), and in two genomic regions of chromosome 1 and X (figure 2C and D).

Antibody amount : 1µg



GTX60816 Dot Image

Dot blot analysis of 0.2 - 100 pmol of the peptides containing other modifications of histone H3 and H4 and the unmodified H3K27 sequence using GTX60816 Histone H3K27me3 (Tri-methyl Lys27) antibody - ChIP grade. Dilution : 1:5,000



GTX60816 ICC/IF Image

ICC/IF analysis of 4% paraformaldehyde fixed HeLa cells using GTX60816 Histone H3K27me3 (Tri-methyl Lys27) antibody - ChIP grade. Green : Primary antibody Blue : DAPI Dilution : 1:200



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