Histone H3K27me1 Antibody

Catalog No. 13-0015

Lot No. 18029002

Pack Size 100 µg

Type	Polyclonal	**Host**	Rabbit
Mol. Wgt.	15 kDa	**Reactivity**	H, M, WR
Format	Aff. Pur. IgG	**Appl.**	ChIP, ChIP-Seq, IF, IHC, WB

Product Description:

Histone H3 is one of the four proteins that are present in the nucleosome, the basic repeating unit subunit of chromatin, consisting of 147 base pairs of DNA wrapped around an octamer of core histone proteins (H2A, H2B, H3 and H4). Methylation of lysine 27 is associated with transcriptional repression by the Polycomb complex of proteins and the formation of facultative heterochromatin.

Immunogen:

Synthetic peptide derived from human histone H3 monomethylated at lysine 27.

Formulation:

Affinity-purified IgG (1 mg/ml) in PBS, pH 7.3, with 0.02% sodium azide and 50% glycerol.

Storage and Stability:

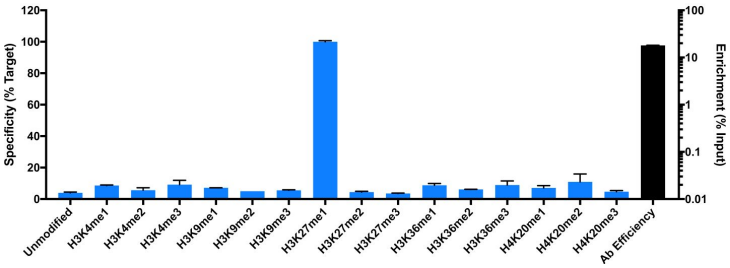
Stable for 2 years at -20°C from date of receipt.

Application Notes:

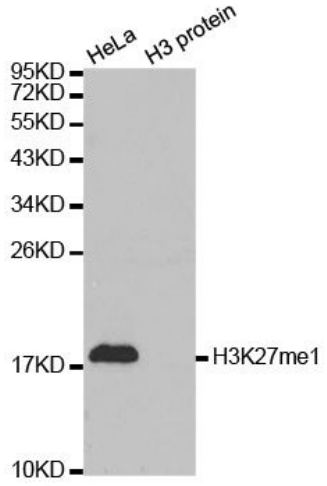
Recommended dilutions:

ChIP 2-5 µg per 1x10^6 cells
IF/IHC 1:50 - 1:200
WB 1:500 - 1:2000

References Using this Product:



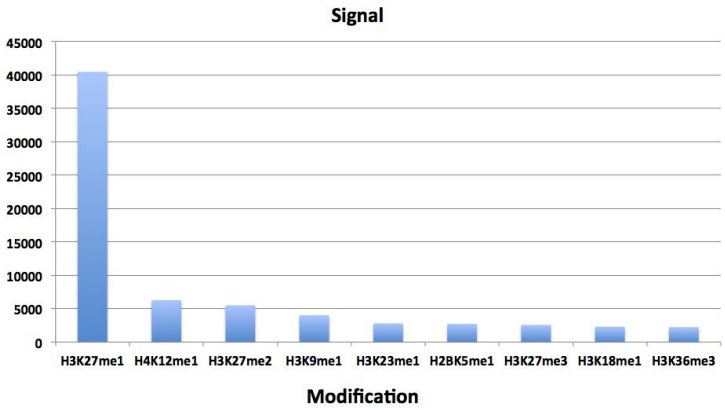
SNAP-ChIP Data: Histone H3K27me1 antibody (3 µg) was tested in a native ChIP experiment with chromatin from HEK-293 cells (~1x10^6 cells). Specificity (left Y-axis) was determined by qPCR for the duplicate DNA barcodes corresponding to each modified nucleosome in the SNAP-ChIP K-MetStat panel (EpiCypher #19-1001, X-axis). Black bar represents antibody efficiency (right Y-axis; log scale) and indicates percentage of the barcoded H3K27me1 nucleosome target immunoprecipitated relative to Input. The antibody exhibited good specificity for the target (<10% cross-reactivity outside H3K27me1) and high efficiency (18.1%). Error bars represent mean ± SEM from two barcoded nucleosome replicates in a single ChIP experiment.



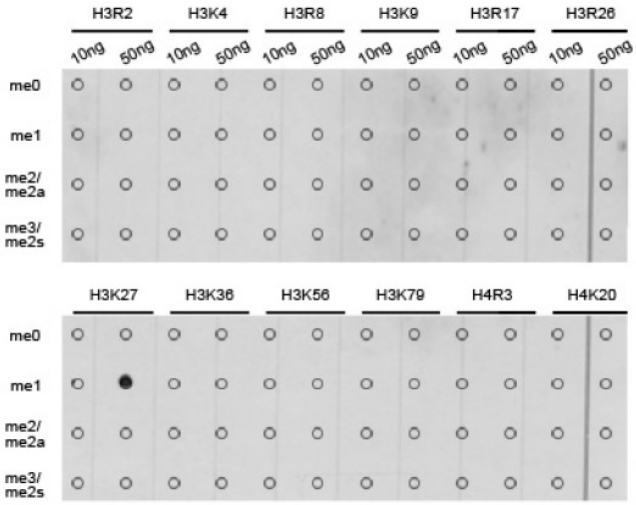
Western Blot Data: HeLa cell extract (HeLa) and recombinant histone H3 (H3 protein) were blotted onto PVDF and probed with Histone H3K27me1 Antibody.

Applications Key: ChIP-Chromatin IP; E-ELISA; FACS-Flow cytometry; IF-Immunofluorescence; IHC-Immunohistochemistry; IP-Immunoprecipitation; WB-Western Blotting

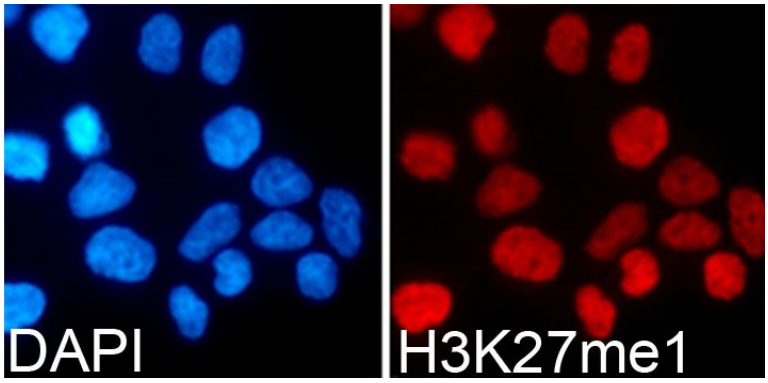
Reactivity Key: B-Bovine; Ce-*C. elegans*; Ch-Chicken; Dm- *Drosophila*; Eu-Eukaryote; H-Human; M-Mouse; Ma-Mammal; R-Rat; Sc-*S.cerevesiae*; Sp-*S. pombe*; WR-Wide Range (predicted); X-Xenopus; Z-Zebrafish



Specificity Data-Peptide Array: EpiTitan™ Histone Peptide array used to confirm the specificity of Histone H3K27me1 Antibody. Data is shown for the highest reacting single modification peptides.



Specificity Data-Dot Blot: Peptide dot blot used to confirm the specificity of Histone H3K27me1 Antibody. Methylated peptides corresponding to the immunogen and related sites were spotted onto PVDF and probed with the antibody.



Immunofluorescence Data: HEK293T cells stained with HIstone H3K27me1 antibody (red) and counterstained with DAPI (blue).

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