

# Histone H3 K4Me2 Antibody

**Catalog No.** 13-0013  
**Lot No.** 14247001  
**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, IP, 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 4 of histone H3 (by SET1, ASH1 or the MLL family of methyltransferases) is associated with transcriptional activation, and also frequently found in the context of H3 acetylation at multiple residues.

## Immunogen:

Synthetic peptide corresponding to the amino terminus of human histone H3 dimethylated at lysine 4.

## 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:

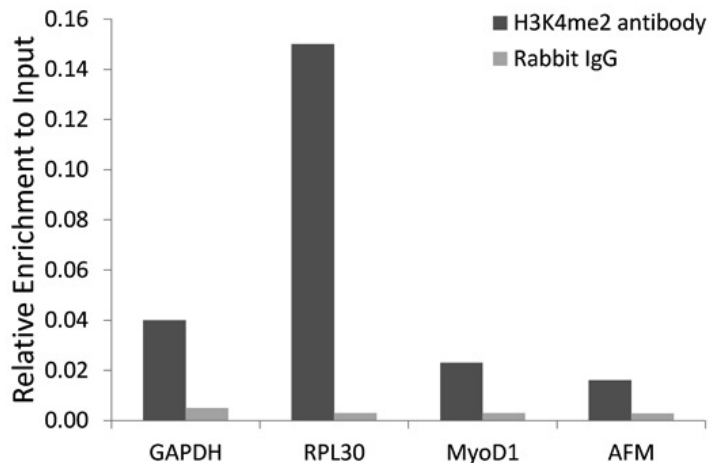
ChIP 2-5 µg per ChIP  
IF/IHC 1:50 - 1:200  
IP 2-5 µg per IP  
WB 1:500 - 1:2000

## References Using this Product:

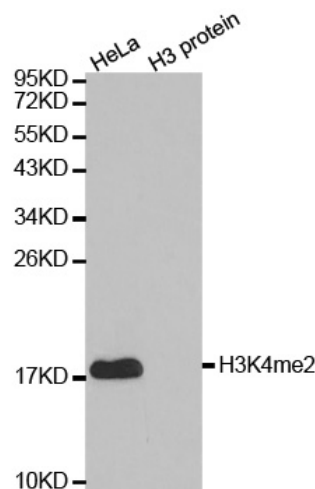
**Applications Key:** ChIP-Chromatin IP; E-ELISA; FACS-Flow cytometry; IF-Immunofluorescence; IHC-Immunohistochemistry; IP-Immunoprecipitation; WB-Western Blotting

**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

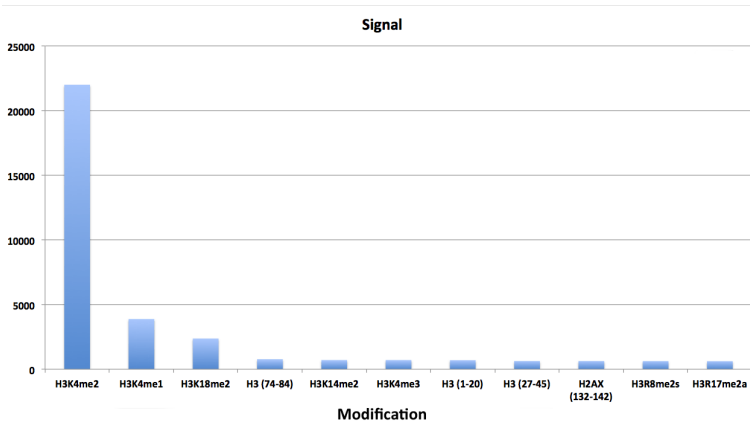
This product is for *in vitro* research use only and is not intended for use in humans or animals.



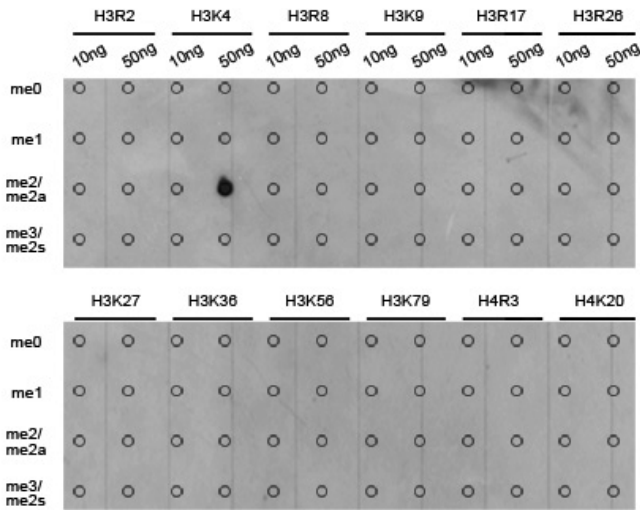
**Chromatin IP Data:** Chromatin IP (ChIP) performed on HEK293 cell chromatin using Histone H3 K4Me2 Antibody (black bars) or rabbit IgG (grey bars) as a negative control. Real time, quantitative PCR (RT-qPCR) was performed on DNA purified from each of the ChIP reactions using a primers specific for the gene indicated. Data are presented as ratios relative to input DNA in ChIP chromatin.



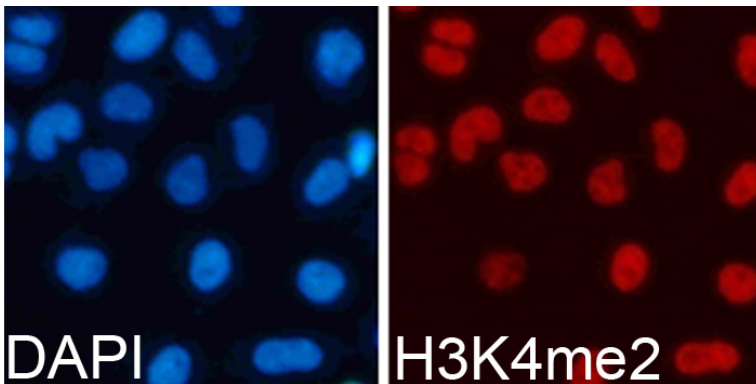
**Western Blot Data:** HeLa cell extract (HeLa) and recombinant histone H3 (H3 protein) were blotted onto PVDF and probed with Histone H3 K4Me2 Antibody.



**Specificity Data-Peptide Array:** EpiTitan™ Histone Peptide array used to confirm the specificity of Histone H3 K4Me2 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 H3 K4Me2 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 H3K4me2 antibody (red) and counterstained with DAPI (blue).