

# Histone H3 K4Me3 Antibody

**Catalog No.** 13-0004  
**Lot No.** 13171001  
**Pack Size** 100  $\mu$ l



**Type** Polyclonal      **Host** Rabbit  
**Mol. Wgt.** 15 kDa      **Reactivity** H, Sc, WR  
**Format** Serum      **Appl.** ChIP, ChIP-seq, IF, WB

## Product Description:

Rabbit polyclonal antibody recognizing the histone H3 trimethylated at lysine 4. Histone H3 is one of a core components of the nucleosome, the smallest subunit of chromatin. Trimethylation of histone H3 at lysine 4 (H3 K4Me3) 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 trimethylated at lysine 4.

## Formulation:

Rabbit serum with 30% glycerol and 0.035% sodium azide.

## Storage and Stability:

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

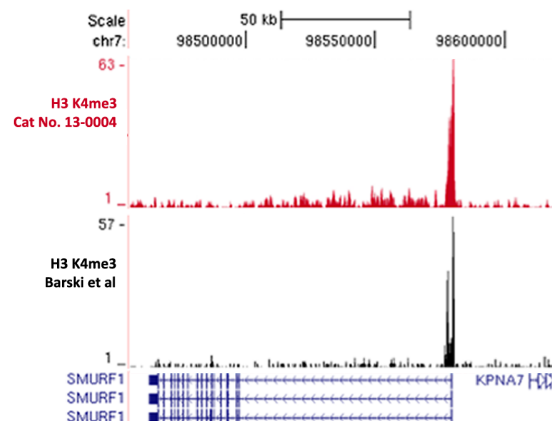
## Application Notes:

Histone H3 K4Me3 Antibody for use in ChIP / ChIP-seq (4 -10  $\mu$ l per reaction), immunofluorescence (1:500 dilution) and Western blot (1:1,000 - 1:3,500).

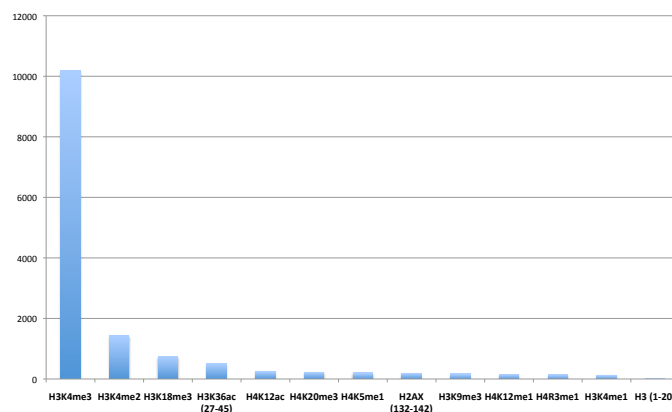
## References Using this Product:

Zhang L et al (2005). *EMBO J* 24: 2379-2390.

Seward DJ et al (2007). *Nat Struct Mol Biol* 14: 240-242.



**ChIP-seq Data:** ChIP-seq data from the human SMURF1 locus gathered using Histone H3 K4Me3 antibody on HeLa cell chromatin (top panel). The bottom panel is comparative data from a published study using a different antibody (Barski, *et al* 2007, Cell 129: 823-837). Data represent histone H3 lysine 4 trimethylation in a 170 kb region on chromosome 7 that includes the SMURF1 locus.



**Specificity Data:** EpiGold™ Histone Peptide arrays used to analyze the histone modification specificity of Histone H3 K4Me3 antibody. Data is shown for the highest reacting singly-modified peptides. For more specificity data, see additional files available on the product web page.

**Applications Key:** ChIP: Chromatin IP; ChIP-seq: Chromatin IP sequencing; 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. cerevisiae*; Sp: *S. pombe*; WR: Wide Range (predicted); X: Xenopus; Z: Zebrafish