

H3T3pK4me2 polyclonal antibody - Classic

Cat. No. C15410278

Type: Polyclonal

Source: Rabbit

Lot #: 001

Size: 50 µg

Concentration: 0.83 µg/µl

Specificity: Human, mouse, *C. elegans*, rat, chicken, *Xenopus*, *Drosophila*, plant

Purity: Affinity purified

Storage: Store at -20°C; for long storage, store at -80°C. Avoid multiple freeze-thaw cycles.

Precautions: This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Applications

	Suggested dilution	Results
ChIP	2-5 µg/million cells	Figure 1
Immunohistochemistry	1:50	
IF	1:50	Figure 2
Western blot	1:500	Figure 3
Dot blot	1:1,000	Figure 4

Target description

Chromatin is the arrangement of DNA and proteins in which chromosomes are formed. Correspondingly, chromatin is formed from nucleosomes, which are comprised of a set of four histone proteins (H2A, H2B, H3, H4) wrapped with DNA. Chromatin is a very dynamic structure in which numerous post-translational modifications work together to activate or repress the availability of DNA to be copied, transcribed, or repaired. These marks decide which DNA will be open and commonly active (euchromatin) or tightly wound to prevent access and activation (heterochromatin). Common histone modifications include methylation of lysine and arginine, acetylation of lysine, phosphorylation of threonine and serine, and sumoylation, biotinylation, and ubiquitylation of lysine. Specifically, the dimethylation of H3 lysine 4 (H3 K4Me2) and phosphorylation of threonine 3 (H3T3p) are known marks of transcriptional activation and mitosis, respectively. While H3K4 has many known modifying enzymes (Set1, Set7/9, MLL, ASH1), Haspin is the only known modifier for H3T3. Recent findings also demonstrate that T3p can promote binding of survivin in the nucleosome.

