

H4K16ac polyclonal antibody - Classic

Cat. No. C15410300

Type: Polyclonal

Source: Rabbit

Lot #: 001

Size: 50 µg

Concentration: 0.62 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
IF	1:100	Figure 1
Dot Blot	1:1,000	Figure 2
Western blot	1:1,000	Figure 3

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. In particular, acetylation of H4 at Lys16 (H4K16ac) plays a role in transcriptional activation and DNA repair. The protein MOF (MYST1) is the primary enzyme to acetylate K16, along with Gcn5, Esa1, ATF2, and Sas2.

Results

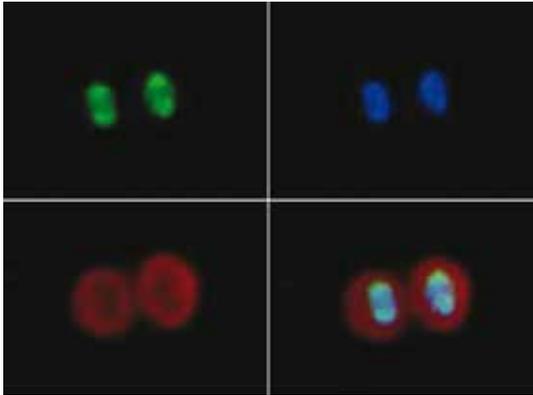


Figure 1. Immunofluorescence

Immunofluorescence of H4K16ac antibody. Tissue: HeLa cells. Fixation: 0.5% PFA. Primary antibody used at a 1:100 dilution for 1 h at RT. Secondary antibody: FITC secondary antibody at 1:10,000 for 45 min at RT. Localization: Histone H4K16ac is nuclear and chromosomal. Staining: Histone H4K16ac is expressed in green, nuclei and alpha-tubulin are counterstained with DAPI (blue) and Dylight 594 (red).

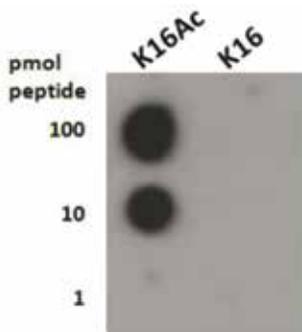


Figure 2. Dot Blot

Dot Blot of H4K16ac antibody. Load: 1, 10, and 100 picomoles of peptide. Primary antibody: used at a 1:1,000 dilution for 45 min at 4°C.



Figure 3. Western Blot

Western Blot of H4K16ac antibody, 30 µg of HeLa histone extracts. Lane 2: NIH-3T3 histone extracts. Primary antibody used at 0.2 µg/ml overnight at 4°C. Secondary antibody: IRDye800™ rabbit secondary antibody at 1:10,000 45 min at RT. Predicted/Observed size: ~13 kDa. Other band(s): None.