

Histone H4H18ph antibody (pAb)

Catalog Nos: 61413, 61414**RRID:** AB_2793626**Application(s):** DB, WB**Reactivity:** Human, Wide Range Predicted**Quantities:** 100 µg, 10 µg**Purification:** Protein A Chromatography**Host:** Rabbit**Isotype:** IgG**Concentration:** 1 µg/µl**Molecular Weight:** 8 kDa

Background: Histone H4 is one of the core components of the nucleosome. The nucleosome is the smallest subunit of chromatin and consists of 147 base pairs of DNA wrapped around an octamer of core histone proteins (two each of Histone H2A, Histone H2B, Histone H3 and Histone H4). Histone H1 is a linker histone, present at the interface between the nucleosome core and DNA entry/exit points; it is responsible for establishing higher-order chromatin structure. Chromatin is subject to a variety of chemical modifications, including post-translational modifications of the histone proteins and the methylation of cytosine residues in the DNA. Reported histone modifications include acetylation, methylation, phosphorylation, ubiquitylation, glycosylation, ADP-ribosylation, carbonylation and SUMOylation; they play a major role in regulating gene expression.

Phosphorylation of histidines in Histone H4 has been known to occur in liver cells and may be associated with proliferation of hepatocytes during regeneration of the liver following damage.

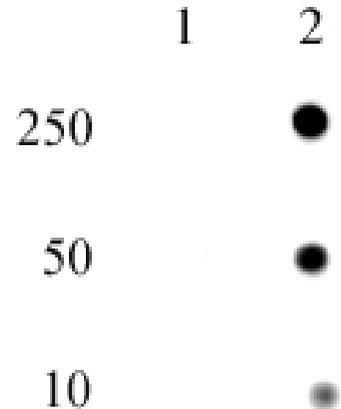
Immunogen: This antibody was raised against a synthetic peptide containing a 3-phosphohistidine analog at Histidine 18 of human Histone H4.

Buffer: PBS containing 30% glycerol and 0.035% sodium azide. Sodium azide is highly toxic.

Application Notes:

Storage and Guarantee: Some products may be shipped at room temperature. This will not affect their stability or performance. Avoid repeated freeze/thaw cycles by aliquoting items into single-use fractions for storage at -20°C for up to 2 years. Keep all reagents on ice when not in storage. This product is guaranteed for 12 months from date of receipt.

This product is for research use only and is not for use in diagnostic procedures.

**Dot blot of Histone H4 phospho Histidine 18 antibody (pAb).**

Dot blot analysis was used to confirm the specificity of H4H18ph antibody for phosphorylation on Histidine 18 of histone H4. Peptides corresponding to the immunogen and an unmodified sequence were spotted onto PVDF and probed with H4H18ph at a 1:1,000 dilution. The amount of peptide (picomoles) spotted is indicated next to each row.

Lane 1: unmodified peptide.

Lane 2: H4H18ph peptide.