

## Biotinylated Histone H3 antibody (pAb)

Catalog No: 61513

**Isotype:** IgG **Reactivity:** Budding Yeast, Human, Other (Wide Range) **Purification:** Affinity Purified **Host:** Rabbit **Volume:** 10 μl **Molecular Weight:** 150 kD

**Background:** Histone H3 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. Histone H1 is responsible for establishing higher-order chromatin structure.

Each histone contains two domains. First, a main globular domain (C-terminal) forming the core of the nucleosome is involved in histone-histone interactions and in binding to the DNA. Secondly, an N-terminal tail is subject to post-translational modifications. 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; these modifications play a major role in regulating gene expression.

Immunogen: This Histone H3 C-terminal antibody was raised against a C-terminal peptide of histone H3.

Buffer: Purified IgG in PBS with 30% glycerol and 0.035% sodium azide. Sodium azide is highly toxic.

**Application Notes:** This Biotinylated Histone H3 antibody has been validated for use as a reporter antibody in our Histone H3 PTM Multiplex Kit (Catalog No. 33115). Because this sequence is conserved from yeast to human, a wide range of reactivity is expected. This ability of this antibody to recognize histone H3 seems to be unaffected by any post-translational modifications to H3.

**Storage and Guarantee:** Antibodies in solution can be stored at -20°C for 2 years. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. This product is guaranteed for 6 months from date of receipt.

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