

Histone H3, C-terminal antibody (pAb)

Catalog No: 39163

Isotype: Serum

Application(s): ChIP, ChIP-Seq, ICC, IF, WB

Reactivity: Budding Yeast, Human, Other (Wide Range)

Purification: None

Host: Rabbit

Volume: 100 µl, 10 µl 5°

Molecular Weight: 17 kDa

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: Rabbit serum containing 30% glycerol and 0.035% sodium azide. Sodium azide is highly toxic. For your convenience, an IgG version (Catalog No. 61277) of this antibody that was purified by Protein A Chromatography is also available.

Application Notes:

Validated Applications:

ChIP: 5 - 15 µl per ChIP

WB: 1:5,000 - 1:15,000 dilution

Published Applications:

ChIP-Seq

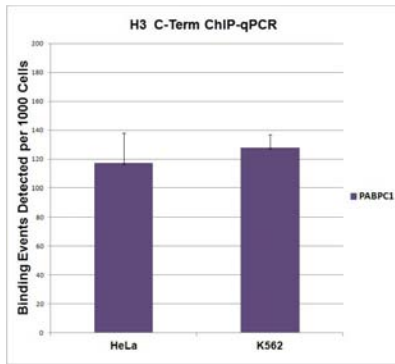
ICC/IF

WB

See references for more information. Individual optimization may be required.

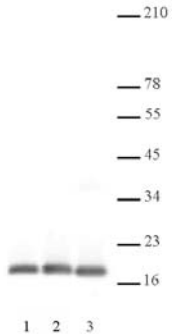
Storage and Guarantee: Antibodies in solution can be stored at -20°C for 2 years. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. This product is guaranteed for 6 months from date of receipt.

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



H3 C-terminal antibody (pAb) tested by ChIP.

Chromatin immunoprecipitation (ChIP) was performed using the ChIP-IT[®] High Sensitivity Kit (Cat. No. 53040) with 15 µg of chromatin from both HeLa and K562 cells and 10 µl H3 C-terminal antibody. ChIP DNA was used in qPCR with the gene-specific primer as indicated. Data are presented as Binding Events Detected per 1000 Cells using Active Motif's Epigenetic Services normalization scheme which accounts for primer efficiency and the amount of chromatin used in the ChIP reaction.



Histone H3, C-terminal antibody tested by Western blot.

HeLa acid extract (5 µg per lane) and recombinant human Histone H3 probed with Histone H3, C-terminal polyclonal antibody at a 1:5,000 dilution.

Lane 1: Acid extract of untreated HeLa cells.

Lane 2: Acid extract of HeLa cells treated with sodium butyrate.

Lane 3: 200 ng recombinant human H3 protein.