

Histone H3 (Phospho-S28) polyclonal antibody

Catalog: BCP00877

Host: Rabbit

Reactivity: Human

BackGround:

Modulation of chromatin structure plays an important role in the regulation of transcription in eukaryotes. The nucleosome, made up of DNA wound around eight core histone proteins (two each of H2A, H2B, H3, and H4), is the primary building block of chromatin. The amino-terminal tails of core histones undergo various post-translational modifications, including acetylation, phosphorylation, methylation, and ubiquitination. These modifications occur in response to various stimuli and have a direct effect on the accessibility of chromatin to transcription factors and, therefore, gene expression. In most species, histone H2B is primarily acetylated at Lys5, 12, 15, and 20. Histone H3 is primarily acetylated at Lys9, 14, 18, 23, 27, and 56. Acetylation of H3 at Lys9 appears to have a dominant role in histone deposition and chromatin assembly in some organisms. Phosphorylation at Ser10, Ser28, and Thr11 of histone H3 is tightly correlated with chromosome condensation during both mitosis and meiosis. Phosphorylation at Thr3 of histone H3 is highly conserved among many species and is catalyzed by the kinase haspin. Immunostaining with phospho-specific antibodies in mammalian cells reveals mitotic phosphorylation at Thr3 of H3 in prophase and its dephosphorylation during anaphase.

Product:

Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2.

Molecular Weight:

~ 19 kDa

Swiss-Prot:

P68431

Purification&Purity:

The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE).

Applications:

WB: 1:1000~1:2000

IF: 1:50~1:200

Storage&Stability:

Store at 4 °C short term. Aliquot and store at -20 °C long term. Avoid freeze-thaw cycles.

Specificity:

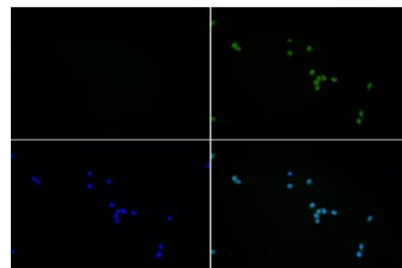
Histone H3 (Phospho-S28) polyclonal antibody detects endogenous levels of Histone H3 protein only when phosphorylated at Ser28.

DATA:

Western blot (WB) analysis of Histone H3 (Phospho-S28) polyclonal antibody at 1:1000 dilution

Lane1:MCF-7 treated with TNF-alpha(20 ng/ml,10 minutes) and Calyculin A(100 nM,10 minutes) whole cell lysate(40ug)

Lane2:MCF-7 whole cell lysate(40ug)



Immunofluorescence analysis of BV2 cells using Histone H3 (Phospho-S28) antibody at dilution of 1:50.

Note:

For research use only, not for use in diagnostic procedure.