

Histone H3T3ph antibody (pAb)

Catalog Nos: 39153, 39154

RRID: AB_2793170

Isotype: Serum

Application(s): DB, ICC, IF, WB

Reactivity: Human, Wide Range Predicted

Volumes: 200 μ l, 10 μ l

Purification: None

Host: Rabbit

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). 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.

In vivo, phosphorylation of histone H3 at threonine 3 begins at early prophase in the vicinity of the nuclear envelope, spreads to the pericentromeric chromatin during prometaphase and is fully reversed by late anaphase, during mitosis.

Immunogen: This Histone H3 phospho Thr3 antibody was raised against a peptide including phospho-threonine 3 of histone H3.

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

Application Notes:

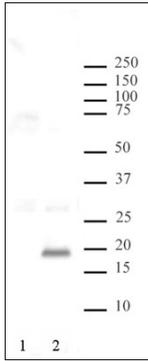
Applications Validated by Active Motif:

WB*: 1:500 - 1:2,000 dilution

*Note: many chromatin-bound proteins are not soluble in a low salt nuclear extract and fractionate to the pellet. Therefore, we recommend a High Salt / Sonication Protocol when preparing nuclear extracts for Western blot.

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.



Histone H3 phospho Thr3 pAb tested by Western blot.

Western blot probed with Histone H3 phospho Thr3 pAb (1:500 dilution).

Lane 1: 20 µg acid extract of HeLa cells.

Lane 2: 20 µg acid extract of HeLa cells treated with colcemid.

Histone H3 phospho Thr3 pAb tested by dot blot analysis.

Dot blot analysis was used to confirm the specificity of Histone H3 phospho Thr3 pAb for phospho-Thr3 of histone H3. Decreasing amounts of peptides corresponding to regions around major sites of histone H3 threonine phosphorylation were spotted onto PVDF and probed with the antibody at a dilution of 1:2,000.

Lane 1: Peptide phosphorylated at threonine 3.

Lane 2: Unmodified threonine 3 peptide.

Lane 3: Peptide phosphorylated at threonine 11.

Lane 4: Unmodified threonine 11 peptide.

Lane 5: Peptide phosphorylated at threonine 45.

Lane 6: Unmodified threonine 45 peptide.

