

Histone H3K37ac antibody (pAb)

Catalog Nos: 61587, 61588

RRID: AB_2793689

Isotype: IgG

Application(s): DB, IF, WB

Reactivity: Human, Wide Range Predicted

Volumes: 100 μ l, 10 μ l

Purification: Affinity Purified

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). 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. 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 antibody was raised against a synthetic peptide containing acetyl-lysine 37 of human Histone H3.

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

Application Notes:

Applications Validated by Active Motif:

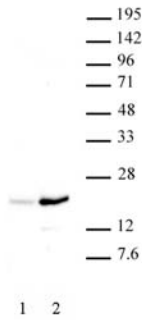
WB*: 1:2,000 - 1:10,000 dilution

IF: 1:500 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 acetyl Lys37 antibody (pAb) tested by Western blot.

HeLa nuclear extract (20 µg per lane) probed with Histone H3 acetyl Lys37 antibody at a 1:2,500 dilution.

Lane 1: no treatment.

Lane 2: cells treated with sodium butyrate.

Histone H3 acetyl Lys37 (pAb) tested by dot blot analysis.

Dot blot analysis was used to confirm the specificity of Histone H3 acetyl Lys37 (pAb) for acetyl Lys37 histone H3. Acetylated peptides corresponding to the immunogen and related peptides were spotted onto PVDF and probed with the antibody at a 1:2,500 dilution. The amount of peptide (picomoles) spotted is indicated next to each row.



Lane 1: H3 acetyl-Lys37 peptide. Lane 2: unmodified H3 peptide. Lane 3: H3 acetyl-Lys36 peptide. Lane 4: H3 acetyl-Lys9 peptide. Lane 5: H3 acetyl-Lys14 peptide. Lane 6: H3 acetyl-Lys18 peptide. Lane 7: H3 acetyl-Lys23 peptide. Lane 8: H3 acetyl-Lys27 peptide. Lane 9: H4 acetyl-Lys5 peptide. Lane 10: H4 acetyl-Lys8 peptide. Lane 11: H4 acetyl-Lys12 peptide. Lane 12: H4 acetyl-Lys16 peptide.

Detection of H3K37ac by immunofluorescence

U2OS cells were stained with H3K37ac antibody at a dilution of 1:500. Left panel: DAPI. Middle panel: H3K37ac antibody staining. Right panel: merge.

