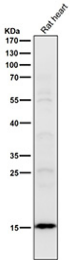
Histone H2B (acetyl K16) Antibody / HIST2H2BE [clone 31H96] (FY12703)

Catalog No.	Formulation	Size
FY12703	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA	100 ul

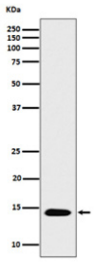
Recombinant RABBIT MONOCLONAL

Bulk quote request

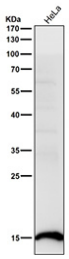
Availability	2-3 weeks
Species Reactivity	Human, Mouse
Format	Liquid
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	31H96
Purity	Affinity-chromatography
Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
UniProt	Q16778
Applications	Western Blot : 1:500-1:2000 Immunohistochemistry : 1:50-1:200 Immunocytochemistry/Immunofluorescence : 1:50-1:200
Limitations	This Histone H2B (acetyl K16) antibody is available for research use only.



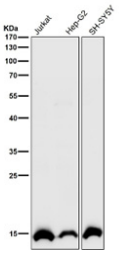
Rat heart tissue lysate tested with the Histone H2B (acetyl K16) antibody at 1:1000 dilution for 1 hour at room temperature. Predicted molecular weight ~15 kDa.



Western blot analysis of Histone H2B expression in HeLa treated with Trichostatin A cell lysate, using Histone H2B (acetyl K16) antibody. Predicted molecular weight ~15 kDa.



Human HeLa cell lysate tested with the Histone H2B (acetyl K16) antibody at 1:1000 dilution for 1 hour at room temperature. Predicted molecular weight ~15 kDa.



All lanes use the Histone H2B (acetyl K16) antibody at 1:1000 dilution for 1 hour at room temperature. Predicted molecular weight ~15 kDa.

Description

Histone H2B (acetyl K16) antibody detects histone H2B specifically when acetylated at lysine 16. Histone H2B is one of the four core histone proteins that package DNA into nucleosomes, the fundamental units of chromatin. Acetylation of lysine residues within histone tails is a key epigenetic modification that influences chromatin structure and gene expression. Acetylation at lysine 16 of H2B is associated with transcriptional activation, chromatin remodeling, and regulation of DNA damage responses.

Histone H2B (acetyl K16) antibody is widely applied in epigenetics, chromatin biology, and cancer research. By detecting acetylation at this specific site, researchers can examine how histone modifications regulate transcription and genome stability. This modification has been linked to gene activation during cell cycle progression, developmental processes, and stress responses.

Chromatin immunoprecipitation with Histone H2B (acetyl K16) antibody isolates genomic regions enriched in this modification, providing insight into transcriptional regulation. Western blotting detects acetylated H2B protein, while immunofluorescence highlights nuclear localization and distribution of acetylated histones. These methods allow comprehensive analysis of chromatin modifications in diverse contexts.

Histone acetylation at lysine 16 plays a role in DNA repair, particularly homologous recombination, by opening chromatin structure at sites of damage. Dysregulation of acetylation is implicated in oncogenesis, neurodegeneration, and developmental disorders. Histone H2B (acetyl K16) antibody supports studies investigating how epigenetic regulation contributes to disease and therapeutic strategies targeting histone modifiers.

Epigenetic therapies, including histone deacetylase inhibitors, influence acetylation levels at lysine 16 and other residues. By applying this antibody, scientists can evaluate how drugs alter chromatin structure and gene expression. This provides both mechanistic and translational value for cancer and neurological disease research.

Histone H2B (acetyl K16) antibody from NSJ Bioreagents provides strong specificity for this key histone modification. Its proven reliability ensures accurate detection of epigenetic changes regulating chromatin function.

Application Notes

Optimal dilution of the Histone H2B (acetyl K16) antibody should be determined by the researcher.

Immunogen

A synthesized peptide derived from human Histone H2B (acetyl K16) was used as the immunogen for the Histone H2B (acetyl K16) antibody.

Storage

Store the Histone H2B (acetyl K16) antibody at -20oC.