bs-0349R **[Primary Antibody]**

Histone H3 Rabbit pAb, Nuclear Loading Control

www.bioss.com.cn
sales@bioss.com.cn
techsupport@bioss.com.cn
400-901-9800

DATASHEET

Host: Rabbit **Isotype:** IgG

Clonality: Polyclonal

GeneID: 8350 **SWISS:** P68431

Target: Histone H3

Immunogen: KLH conjugated synthetic peptide derived from human Histone H3: 71-136/136.

Purification: affinity purified by Protein A

Concentration: 1mg/ml

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Background: Modulation of the chromatin structure plays an important role in the regulation of transcription in eukaryotes. The nucleosome, made up of four core histone proteins (H2A, H2B, H3 and H4), is the primary building block of chromatin. The N-terminal tail of core histones undergoes different posttranslational modifications including acetylation, phosphorylation and methylation. These modifications occur in response to cell signal stimuli and have a direct effect on gene expression. In most species, the histone H2B is primarily acetylated at lysines 5, 12, 15 and 20. Histone H3 is primarily acetylated at lysines 9, 14, 18 and 23. Acetylation at lysine 9 appears to have a dominant role in histone deposition and chromatin assembly in some organisms. Phosphorylation at Ser10 of histone H3 is tightly correlated with chromosome condensation during both mitosis and meiosis.

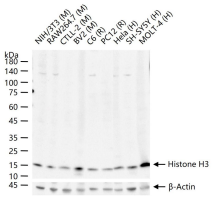
Applications: **WB** (1:5000-50000)
IHC-P (1:500-2000)
IHC-F (1:500-2000)
IF (1:500-2000)
Flow-Cyt (1μg/Test)

Reactivity: Human, Mouse, Rat (predicted: Rabbit, Pig, Cow, Fruit Fly)

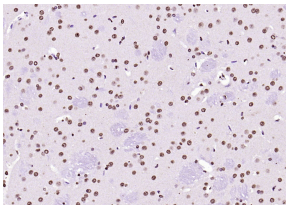
Predicted MW.: 15 kDa

Subcellular Location: Nucleus

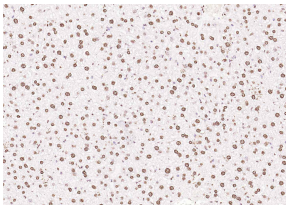
VALIDATION IMAGES



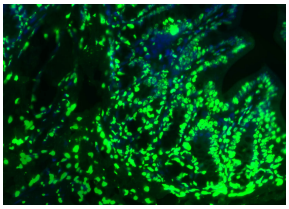
25 ug total protein per lane of various lysates (see on figure) probed with Histone H3 polyclonal antibody, unconjugated (bs-0349R) at 1:1000 dilution and 4°C overnight incubation. Followed by conjugated secondary antibody incubation at r.t. for 60 min.

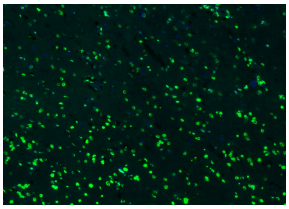


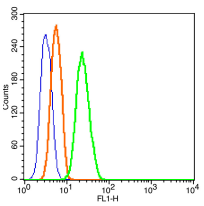
Paraformaldehyde-fixed, paraffin embedded (rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Histone H3HIST3H3(Nuclear Loading Control)) Polyclonal Antibody, Unconjugated (bs-0349R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.



Paraformaldehyde-fixed, paraffin embedded (mouse liver); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Histone H3 (Nuclear Loading Control)) Polyclonal Antibody, Unconjugated (bs-0349R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.



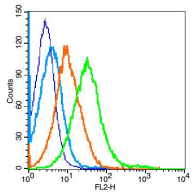




Paraformaldehyde-fixed, paraffin embedded (rat colon); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Histone H3 (Nuclear Loading Control)) Polyclonal Antibody, Unconjugated (bs-0349R) at 1:300 overnight at 4°C, followed by a conjugated Goat Anti-Rabbit IgG antibody (YF488) for 90 minutes, and DAPI for nuclei staining.

Paraformaldehyde-fixed, paraffin embedded (human brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Histone H3 (Nuclear Loading Control)) Polyclonal Antibody, Unconjugated (bs-0349R) at 1:500 overnight at 4°C, followed by a conjugated Goat Anti-Rabbit IgG antibody (YF488) for 90 minutes, and DAPI for nuclei staining.

Blank control: K562. Primary Antibody (green line): Rabbit Anti-Histone H3/HIST3H3 antibody (bs-0349R) Dilution: 1μg /10^6 cells; Isotype Control Antibody (orange line): Rabbit IgG . Secondary Antibody : Goat anti-rabbit IgG-PE Dilution: 1μg /test. Protocol The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 90% ice-cold methanol for 20 min at-20°C. The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.



Blank control: Mouse spleen cells (blue). Primary Antibody:Rabbit Anti-Histone H3/HIST3H3 antibody(bs-0349R), Dilution: 1μg in 100 μL 1X PBS containing 0.5% BSA; Isotype Control Antibody: Rabbit IgG(orange) ,used under the same conditions); Secondary Antibody: Goat anti-rabbit IgG-PE(white blue), Dilution: 1:200 in 1 X PBS containing 0.5% BSA. Protocol The cells were fixed with 2% paraformaldehyde (10 min). Primary antibody (bs-0349R, 1μg /1x10^6 cells) were incubated for 30 min on the ice, followed by 1 X PBS containing 0.5% BSA + 1 0% goat serum (15 min) to block non-specific protein-protein interactions. Then the Goat Anti-rabbit IgG/PE antibody was added into the blocking buffer mentioned above to react with the primary antibody at 1/200 dilution for 30 min on ice. Acquisition of 20,000 events was performed.

SELECTED CITATIONS

- **[IF=8.56]** Qian, Yi, et al. "Silver Nanoparticle-Induced Hemoglobin Decrease Involves Alteration of Histone 3 Methylation Status." Biomaterials (2015). WB ;="Mouse". 26295435
- **[IF=7.561]** Zheng Hao. et al. Decreased Expression of Programmed Death Ligand-L1 by Seven in Absentia Homolog 2 in Cholangiocarcinoma Enhances T-Cell–Mediated Antitumor Activity. Front Immunol. 2022 Jan;0:138 WB ;Human. 35154166
- **[IF=7.243]** Fanchun Zeng. et al. Antagonizing exosomal miR-18a-5p derived from prostate cancer cells ameliorates metastasis-induced osteoblastic lesions by targeting Hist1h2bc and activating Wnt/β-catenin pathway. GENES DIS. 2022 Jul;: WB ;Mouse. 10.1016/j.gendis.2022.06.007
- **[IF=6.684]** Zhao-Ming Xiao. et al. SMARCC1 Suppresses Tumor Progression by Inhibiting the PI3K/AKT Signaling Pathway in Prostate Cancer. Front Cell Dev Biol. 2021; 9: 678967 WB ;Human. 34249931
- **[IF=6.022]** Huina Liu. et al. LncRNA, PLXDC2‐OT promoted the osteogenesis potentials of MSCs by inhibiting the deacetylation function of RBM6/SIRT7 complex and OSX specific isoform. 2021 Mar 08 WB ;Human. 33684230