bsm-33042R **[Primary Antibody]**

H3C1 | Histone H3 Recombinant Rabbit mAb, Loading Control

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DATASHEET

Host: Rabbit
Isotype: IgG
Clonality: Recombinant
CloneNo.: 3G1
GeneID: 8350
SWISS: P68431
Target: H3C1 | Histone H3
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)
ICC/IF (1:100-500)
IP (1:50-200)
ChIP (6μg/IP)

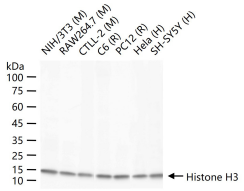
Reactivity: Human, Mouse, Rat (predicted: Hamster, Bee, Yeast)

Predicted MW.: 15 kDa

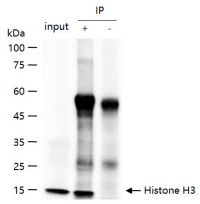
Observed MW.: 15 kDa

Subcellular Location: Nucleus

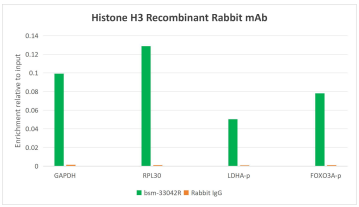
VALIDATION IMAGES



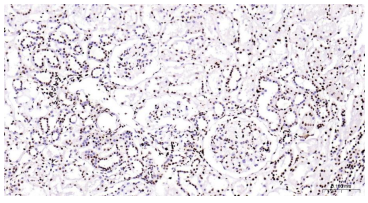
25 ug total protein per lane of various lysates (see on figure) probed with Histone H3 monoclonal antibody, unconjugated (bsm-33042R) at 1:5000 dilution and 4°C overnight incubation. Followed by conjugated secondary antibody incubation at r.t. for 60 min.



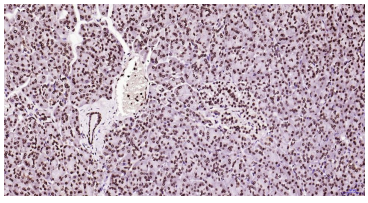
Histone H3 was immunoprecipitated from Jurkat cell lysate with bsm-33042R at 1/200 dilution. Western blot was performed from the immunoprecipitate using protein A/G beads. HRP conjugated Goat Anti-Rabbit IgG (H&L) was used as secondary antibody. Lane 1: Jurkat cell lysate (Input). Lane 2: bsm-33042R IP in Jurkat cell lysate. Lane 3: native rabbit IgG IP in Jurkat cell lysate (negative control).



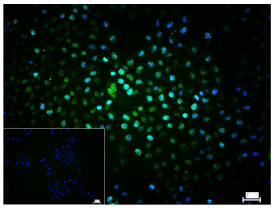
Chromatin immunoprecipitation was performed using cross-linked chromatin from 5×10⁶ HeLa cells per IP, with 6 μg of bsm-33042R antibody or 6 μg of normal rabbit IgG(negative control bs-0295P) , and 20 μL of Protein A/G MagBeads per IP. The immunoprecipitated DNA was quantified by real-time PCR using primers specific for the human GAPDH-CDS, RPL30 exon 4, LDHA-promoter and FOXO3A-promoter regions. The data are presented as enrichment of each sample relative to the total amount of input at each amplicon.



Paraformaldehyde-fixed, paraffin embedded Human Kidney; Antigen retrieval by boiling in



Paraformaldehyde-fixed, paraffin embedded Human Pancreas; Antigen retrieval by boiling in

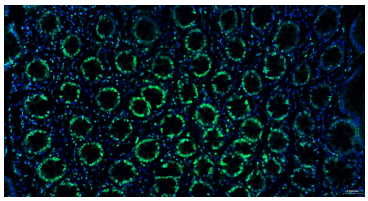


4% Paraformaldehyde-fixed Hela (H) cell; Triton X-100 at r.t. for 20 min; Antibody incubation with

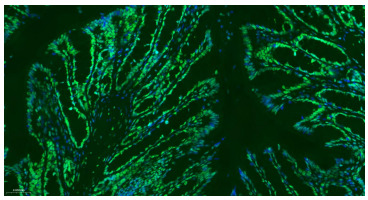
sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Histone H3 Monoclonal Antibody, Unconjugated(bsm-33042R) at 1:200 overnight at 4°C, followed by conjugation to the bs-0295G-HRP and DAB (C-0010) staining.

sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Histone H3 Monoclonal Antibody, Unconjugated(bsm-33042R) at 1:200 overnight at 4°C, followed by conjugation to the SP Kit(Rabbit, SP-0023) and DAB (C-0010) staining.

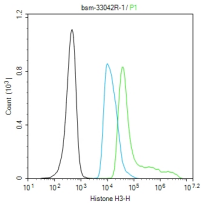
(Histone H3) monoclonal Antibody, unconjugated (bsm-33042R) 1:100, 90 min at 37°C; followed by conjugated Goat Anti-Rabbit IgG antibody (green, bs-60295G-BF488) at 37°C for 90 min, DAPI (blue, C02-04002) was used to stain the cell nuclei. PBS instead of the primary antibody was used as the blank control.



Paraformaldehyde-fixed, paraffin embedded Human Colon; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; The section was incubated with Histone H3 Antibody, Unconjugated (bsm-33042R) at 1:200 overnight at 4°C. Followed by conjugated Goat Anti-Rabbit IgG antibody (Green, bs-0295G-BF488), DAPI (blue, C02-04002) was used to stain the cell nuclei.



Paraformaldehyde-fixed, paraffin embedded Mouse Colon; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Histone H3 Monoclonal Antibody, Unconjugated (bsm-33042R) at 1:200 overnight at 4°C. Followed by conjugated Goat Anti-Rabbit IgG antibody (green, bs-0295G-BF488), DAPI (blue, C02-04002) was used to stain the cell nuclei.



The Hela (H) cells were fixed with 4% PFA (10 min at r.t.) and then permeabilized with 90% ice-cold methanol for 20 min at -20°C,the cells then were incubated in 5%BSA to block non-specific protein-protein interactions (30 min at r.t.).Primary Antibody (green):Rabbit Anti-Histone H3 antibody (bsm-33042R): 1 µg/10^6 cells; Secondary Antibody (white blue): Goat anti-Rabbit IgG-BF488 (bs-60295G-BF488): 1 µg/test. Blank control (black): PBS. Acquisition of 20,000 events was performed.

SELECTED CITATIONS

- **[IF=5.9]** Zhongchen Li. et al. FKBP5-CCL5 interaction promotes neuroinflammation and neuronal apoptosis in ischemic stroke by regulating the MAPK pathway and enhancing NET formation. FRONT IMMUNOL. 2025 Sep;16: IHC ;Mouse. 41098728