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## Histone H3 (Di Methyl K4) Rabbit pAb

Catalog Number: bs-3770R

Target Protein: Histone H3 (Di Methyl K4)

Concentration: 1mg/ml

Form: Liquid

Host: Rabbit

Clonality: Polyclonal

Isotype: IgG

Applications: WB (1:500-2000), IHC-P (1:100-500), IHC-F (1:100-500), IF (1:100-500), Flow-Cyt (0.2µg /Test)

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

Predicted MW: 15 kDa

Entrez Gene: 8350

Swiss Prot: P68431

Source: KLH conjugated synthesised methylpeptide derived from human Histone H3 around the methylation site of Di Methyl K4: RT(Di Methyl-K)QT.

Purification: affinity purified by Protein A

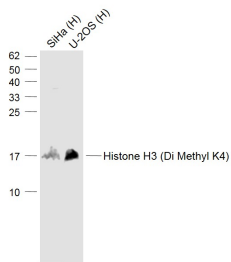
Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

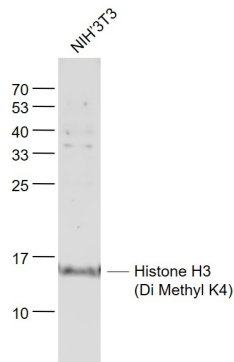
**Background:** Modulation of the chromatin structure plays an important role in the regulation of transcription in eukaryotes. The nucleosome, made up of four core histone proteins (H2A, H2B, H3 and H4), is the primary building block of chromatin. The N-terminal tail of core histones undergoes different 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.

### VALIDATION IMAGES

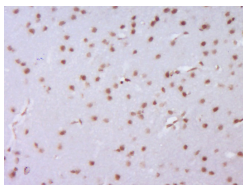
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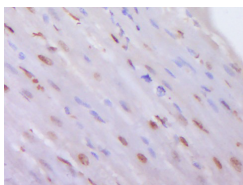
Sample: Lane 1: SiHa (Human) Cell Lysate at 30 ug Lane 2: U-2OS (Human) Cell Lysate at 30 ug Primary: Anti-Histone H3 (Di Methyl K4) (bs-3770R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 17 kD Observed band size: 17 kD



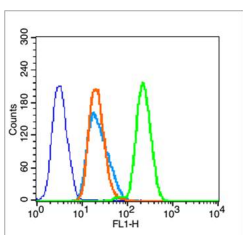
Sample: NIH/3T3(Mouse) Cell Lysate at 30 ug Primary: Anti- Histone H3 (Di Methyl K4) (bs-3770R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 15 kD Observed band size: 15 kD



Paraformaldehyde-fixed, paraffin embedded (Mouse 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 H3 (Di Methyl K4)) Polyclonal Antibody, Unconjugated (bs-3770R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.



Paraformaldehyde-fixed, paraffin embedded (Rat heart); 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 (Di Methyl K4)) Polyclonal Antibody, Unconjugated (bs-3770R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.



Blank control (blue line): HeLa (fixed with 70% ethanol (Overnight at 4°C) and then permeabilized with 90% ice-cold methanol for 30 min on ice). Primary Antibody (green line): Rabbit Anti-Histone H3 (Di Methyl K4) antibody (bs-3770R), Dilution: 0.2µg /10<sup>6</sup> cells; Isotype Control Antibody (orange line): Rabbit IgG . Secondary Antibody (white blue line): Goat anti-rabbit IgG-FITC, Dilution: 1µg /test.