

# beta -hydroxybutyryl-HIST1H3A (K4) Antibody



PACO60507

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## Product Information

**Size:**

50ul

**Reactivity:**

Human

**Source:**

Rabbit

**Isotype:**

IgG

**Applications:**

ELISA, WB, ICC, ChIP

**Recommended dilutions:**

ELISA:1:2000-1:10000, WB:1:1000-1:5000,  
ICC:1:10-1:100

**Protein Background:**

Core component of nucleosome. Nucleosomes wrap and compact DNA into chromatin, limiting DNA accessibility to the cellular machineries which require DNA as a template. Histones thereby play a central role in transcription regulation, DNA repair, DNA replication and chromosomal stability. DNA accessibility is regulated via a complex set of post-translational modifications of histones, also called histone code, and nucleosome remodeling.

**Gene ID:**

HIST1H3A

**Uniprot**

P68431

**Synonyms:**

Histone H3.1 (Histone H3/a) (Histone H3/b) (Histone H3/c) (Histone H3/d) (Histone H3/f) (Histone H3/h) (Histone H3/i) (Histone H3/j) (Histone H3/k) (Histone H3/l), HIST1H3A; HIST1H3B; HIST1H3C; HIST1H3D; HIST1H3E; HIST1H3F; HIST1H3G; HIST1H3H; HIST1H3I; HIST1H3J, H3FA; H3FL; H3FC; H3FB; H3FD; H3FI; H3FH; H3FK; H3FF; H3FJ

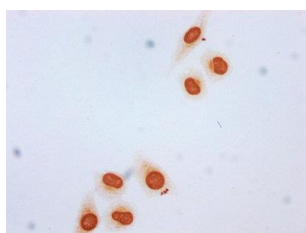
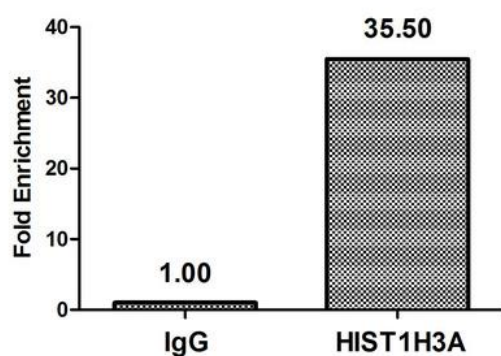
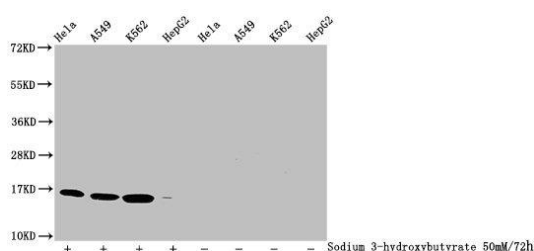
**Immunogen:**

Peptide sequence around site of &beta; -hydroxybutyryl-Lys (4) derived from Human Histone H3.1.

**Storage:**

Preservative: 0.03% Proclin 300. Constituents: 50% Glycerol, 0.01M PBS, pH 7.4

## Product Images



Western Blot. Detected samples: HeLa whole cell lysate, A549 whole cell lysate, K562 whole cell lysate, HepG2 whole cell lysate; Untreated (-) or treated (+) with 50mM sodium 3-hydroxybutyrate for 72h. All lanes: HIST1H3A antibody at 1:2000. Secondary: Goat polyclonal to rabbit IgG at 1/40000 dilution. Predicted band size: 16 kDa. Observed band size: 16 kDa.

Chromatin Immunoprecipitation HeLa ( $4 \times 10^6$ , treated with 30mM sodium 3-hydroxybutyrate for 4h) were treated with Micrococcal Nuclease, sonicated, and immunoprecipitated with 5 $\mu$ g anti-HIST1H3A (PACO60507) or a control normal rabbit IgG. The resulting ChIP DNA was quantified using real-time PCR with primers against the beta - Globin promoter.

Immunocytochemistry analysis of PACO60507 diluted at 1:20 and staining in HeLa cells (treated with 50mM sodium 3-hydroxybutyrate for 72h) performed on a Leica Bond<sup>TM</sup> system. The cells were fixed in 4% formaldehyde, permeabilized using 0.2% Triton X-100 and blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.