

# **Product datasheet for TA387647**

### **OriGene Technologies, Inc.** 9620 Medical Center Drive, Ste 200

Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

### **H2BC4 Rabbit Polyclonal Antibody**

### **Product data:**

Product Type: Primary Antibodies

Applications: ChIP, ICC, IF, IP, WB

**Recommended Dilution:** Recommended dilution: WB:1:100-1:1000, ICC:1:10-1:100, IF:1:1-1:10, IP:1:200-1:2000

Reactivity: Human
Host: Rabbit
Isotype: IgG

Clonality: Polyclonal

Immunogen: Peptide sequence around site of Acetyl-Lys (20) derived from Human Histone H2B type 1-

C/E/F/G/I

Formulation: Preservative: 0.03% Proclin 300

Constituents: 50% Glycerol, 0.01M PBS, pH 7.4

**Concentration:** lot specific

**Purification:** Antigen Affinity Purified

Conjugation: Unconjugated

**Storage:** Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.

**Stability:** 1 year from dispatch.

Database Link: P62807

**Background:** Core component of nucleosome. Nucleosomes wrap and compact DNA into chromatin,

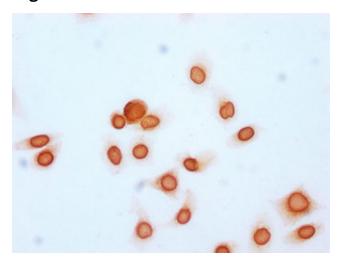
limiting DNA accessibility to the cellular machineries which require DNA as a template. Histones thereby play a central role in transcription regulation, DNA repair, DNA replication

and chromosomal stability. DNA accessibility is regulated via a complex set of post-

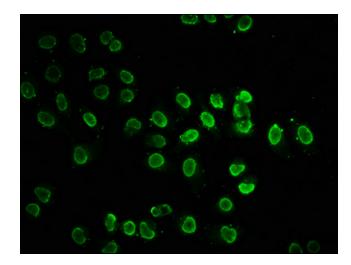
translational modifications of histones, also called histone code, and nucleosome remodeling.



## **Product images:**

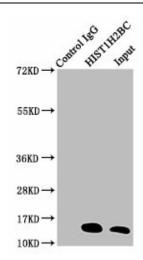


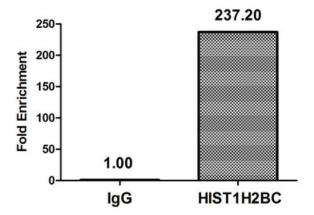
Immunocytochemistry analysis of TA387647 diluted at 1:15 and staining in Hela cells (treated with 30mM sodium butyrate for 4h) performed on a Leica BondTM system. The cells were fixed in 4% formaldehyde, permeabilized using 0.2% Triton X-100 and blocked with 10% normal goat serum 30min at RT. Then primary 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.

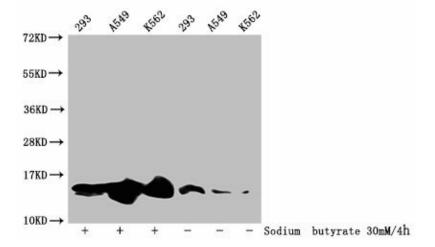


Immunofluorescence staining of Hela cells (treated with 30mM sodium butyrate for 4h) with TA387647 at 1:7.5, counter-stained with DAPI. The cells were fixed in 4% formaldehyde, permeabilized using 0.2% Triton X-100 and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4°C. The secondary antibody was Alexa Fluor 488-congugated AffiniPure Goat Anti-Rabbit IgG(H+L).









Immunoprecipitating HIST1H2BC in A549 whole cell lysate (treated with 30mM sodium butyrate for 4h)

Lane 1: Rabbit control IgG instead of TA387647 in A549 whole cell lysate (treated with 30mM sodium butyrate for 4h). For western blotting, a HRP-conjugated Protein G antibody was used as the secondary antibody (1/2000)

Lane 2: TA387647 (5µg) + A549 whole cell lysate (treated with 30mM sodium butyrate for 4h) (500µg)

Lane 3: A549 whole cell lysate (treated with 30mM sodium butyrate for 4h) (20µg)

Chromatin Immunoprecipitation Hela ( $10^6$ , treated with 30mM sodium butyrate for 4h) were treated with Micrococcal Nuclease, sonicated, and immunoprecipitated with 5 $\mu$ g anti-HIST1H2BC (TA387647) or a control normal rabbit IgG. The resulting ChIP DNA was quantified using real-time PCR with primers against the  $\beta$ -Globin promoter.

Western Blot

Detected samples: 293 whole cell lysate, A549 whole cell lysate, K562 whole cell lysate; Untreated (-) or treated (+) with 30mM sodium

butyrate for 4h

All lanes: HIST1H2BC antibody at 1:100

Secondary

Goat polyclonal to rabbit IgG at 1/50000 dilution

Predicted band size: 14 kDa Observed band size: 14 kDa