

## Anti-Butyryl-Histone H3 (Lys14) Antibody (7N271)

### Product Details

Ig Type:	IgG
Reactivity:	Human,Mouse,Rat
Molecular Weight:	Theoretical: 15 kDa.
Clone:	7N271
Purification:	Protein A purified

### Applications

Verified Activity:	1. Blocking buffer: 5% NFDM/TBST	
	Primary Ab dilution: 1: 2000	
	Primary Ab incubation condition: 2 hours at	room temperature
	Secondary Ab: Goat Anti-Rabbit IgG H&L (HRP)	
	Lysate: (-): HeLa, (+): HeLa+sodium butyrate	(30 mM, 4 hr)
	Protein loading quantity: 20 µg	
	Exposure time: 60 s	
	Predicted MW: 15 kDa	
	Observed MW: 15 kDa	
	2. Blocking buffer: 5% NFDM/TBST	
	Primary Ab dilution: 1: 2000	
	Primary Ab incubation condition: 2 hours at	room temperature
	Secondary Ab: Goat Anti-Rabbit IgG H&L (HRP)	
	Lysate: (-): MCF-7+serum starvation (14 hr), (+):	MCF-7+sodium butyrate (50 mM, 24
	hr) + trichostain A (500 ng/ml, 4 hr)	
Protein loading quantity: 20 µg		
Exposure time: 60 s		
Predicted MW: 15 kDa		
Observed MW: 15 kDa		
3. Blocking buffer: 5% NFDM/TBST		
Primary Ab dilution: 1: 2000		
Primary Ab incubation condition: 2 hours at	room temperature	
Secondary Ab: Goat Anti-Rabbit IgG H&L (HRP)		
Lysate: 1: Neuro-2a, 2: BRL		
Protein loading quantity: 20 µg		
Exposure time: 60 s		
Predicted MW: 15 kDa		
Observed MW: 15 kDa		

## A DRUG SCREENING EXPERT

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Application: WB  
Recommended WB: 1:500-1000

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### Properties

Stability & Storage: Store at 2°C-8°C for 1 month. Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.  
Shipping: Shipping with blue ice.

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### Antigen Details

Immunogen: KLH conjugated synthetic peptide: human Histone H3 (Butyryl-Lys14)  
Antigen Species: Human  
Gene ID: 8350  
Uniprot ID: P68431

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### Research 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.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

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