Data Sheet (Cat.No.TMAB-07101)

TargetMol

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

Application:	WB
Recommended	WB: 1:500-1000

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.

Antigen Details

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

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.

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