

## Recombinant Histone H4 (Acetyl Lys77) Monoclonal Antibody

catalog number: **AN301408L**

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

### Description

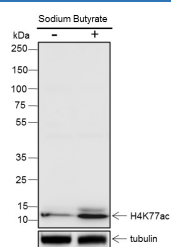
<b>Reactivity</b>	Human;Rat;Mouse
<b>Immunogen</b>	Acetylated human histone H4 (Lys77) peptide
<b>Host</b>	Rabbit
<b>Isotype</b>	IgG, $\kappa$
<b>Clone</b>	A103
<b>Purification</b>	Protein A purified
<b>Buffer</b>	PBS, 50% glycerol, 0.05% Proclin 300, 0.05% protein protectant.

### Applications

### Recommended Dilution

<b>WB</b>	1:500-1:2000
<b>IHC</b>	1:200-1:1000
<b>IP</b>	1:50-1:100
<b>ChIP</b>	6 $\mu$ g/5 $\times$ 10 <sup>6</sup> cells

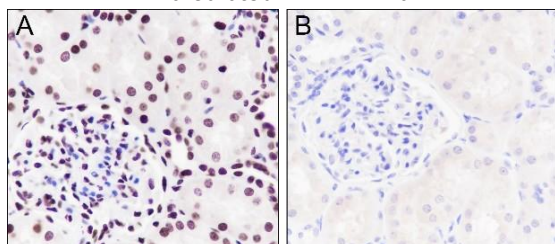
### Data



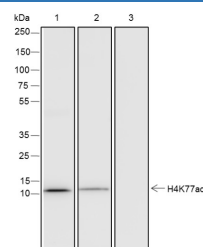
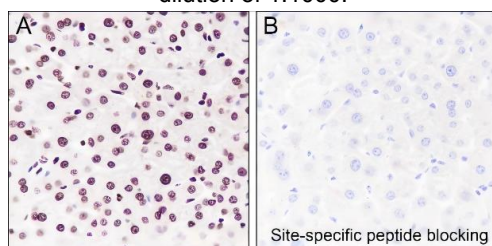
Western Blot with Histone H4 (Acetyl Lys77) Monoclonal Antibody at dilution of 1:2000. (-): HeLa, (+): HeLa + Sodium Butyrate (30mM, 4hr)

**Observed-MW:11 kDa**

**Calculated-MW:11 kDa**



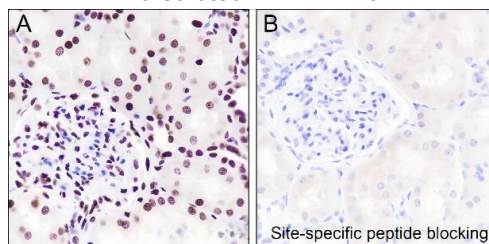
Immunohistochemistry of paraffin-embedded Human kidney using Histone H4 (Acetyl Lys77) Monoclonal Antibody at dilution of 1:1000.



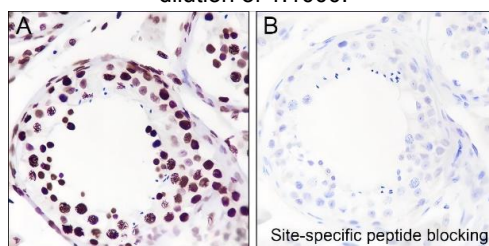
Western Blot with Histone H4 (Acetyl Lys77) Monoclonal Antibody at dilution of 1:2000. Lane 1: MCF-7, Lane 2: BRL, Lane 3: Recombinant histone H4 (20 ng)

**Observed-MW:11 kDa**

**Calculated-MW:11 kDa**



Immunohistochemistry of paraffin-embedded Human liver using Histone H4 (Acetyl Lys77) Monoclonal Antibody at dilution of 1:1000.



### For Research Use Only

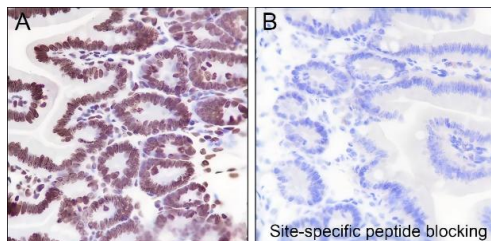
Toll-free: 1-888-852-8623  
Web: [www.elabscience.com](http://www.elabscience.com)

Tel: 1-832-243-6086  
Email: [techsupport@elabscience.com](mailto:techsupport@elabscience.com)

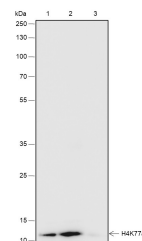
Fax: 1-832-243-6017

Rev. V1.1

Immunohistochemistry of paraffin-embedded Human testis using Histone H4 (Acetyl Lys77) Monoclonal Antibody at dilution of 1:1000.



Immunohistochemistry of paraffin-embedded Mouse colon using Histone H4 (Acetyl Lys77) Monoclonal Antibody at dilution of 1:1000.



Immunohistochemistry of paraffin-embedded Rat liver using Histone H4 (Acetyl Lys77) Monoclonal Antibody at dilution of 1:1000.

Immunoprecipitation analysis using anti-Histone H4 (Acetyl Lys77) Monoclonal Antibody. Western blot was performed from the immunoprecipitate using Histone H4 (Acetyl Lys77) Monoclonal Antibody at a dilution of 1:100. Lane 1: 5% Input, Lane 2: Histone H4 Monoclonal Antibody, Lane 3: Rabbit monoclonal IgG Isotype

**Observed-MW:11 kDa**

**Calculated-MW:11 kDa**

## Preparation & Storage

### Storage

Store at -20°C Valid for 12 months. Avoid freeze / thaw cycles.

### Shipping

Ice bag

## Background

Histone post-translational modifications (PTMs), known as the “histone code”, are key mechanisms of epigenetics that modulate chromatin structures. The PTMs on histone including acetylation, methylation, phosphorylation, and novel acylations directly affect the accessibility of chromatin to transcription factors and other epigenetic regulators, altering genome stability and gene transcription. Histone acetylation, tightly controlled by the opposing action of histone acetyltransferases (HATs) and histone deacetylases (HDACs), occurs primarily at lysine residues on the N-terminal tails of histones H2A (Lys5, 9, and 15), H2B (Lys5, 12, 15, 16, and 20), H3 (Lys4, 9, 14, 18, 23, 27, and 36), and H4 (Lys5, 8, 12, 16, and 20), and plays vital roles in the regulation of gene expression, DNA damage repair, and chromatin dynamics. Recent research has identified that H2BK120ac, H3.3K18ac, and H4K77ac are significantly associated with the survival of hepatocellular carcinoma (HCC) patients. Furthermore, H4K77ac has been linked to HCC recurrence. These findings suggest that H2BK120ac, H3.3K18ac, and H4K77ac may be potential prognostic factors for HCC.

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