

# Histone H3 Rabbit mAb

**Catalog No.: AC070** **Recombinant**

## Basic Information

**Observed MW**

17 kDa

**Calculated MW**

15 kDa

**Category**

Loading control antibody

**Applications**

WB, IP, IHC-P, ChIP, ELISA

**Cross-Reactivity**

Human, Mouse, Rat, Other (Wide Range Predicted)

**CloneNo number**

ARC75100

## Background

Histones are basic nuclear proteins that are responsible for the nucleosome structure of the chromosomal fiber in eukaryotes. This structure consists of approximately 146 bp of DNA wrapped around a nucleosome, an octamer composed of pairs of each of the four core histones (H2A, H2B, H3, and H4). The chromatin fiber is further compacted through the interaction of a linker histone, H1, with the DNA between the nucleosomes to form higher order chromatin structures. This gene is intronless and encodes a replication-dependent histone that is a member of the histone H3 family. Transcripts from this gene lack polyA tails; instead, they contain a palindromic termination element. This gene is found in the large histone gene cluster on chromosome 6p22-p21.3.

## Recommended Dilutions

**WB** 1:80000 - 1:320000**IP** 0.5µg-4µg antibody for  
100µg-300µg extracts of  
whole cells**IHC-P** 1:5000 - 1:20000**ChIP** 2µg antibody for  
10µg-15µg of Chromatin**ELISA** Recommended starting  
concentration is 1 µg/mL.  
Please optimize the  
concentration based on  
your specific assay  
requirements. For high-  
ratio antibody dilutions  
(≥1:10000) a sequential  
dilution method is  
strongly recommended  
to ensure measurement  
accuracy.

## Immunogen Information

**Gene ID**

8290/8350

**Swiss Prot**

Q16695/P68431

**Immunogen**

Synthetic peptide. This information is considered to be commercially sensitive.

**Synonyms**H3/A; H3C2; H3C3; H3C4; H3C6; H3C7; H3C8; H3FA; H3C10; H3C11; H3C12; HIST1H3A;  
Histone H3; H3-4; H3/t; H3/g; H3FT; HIST3H3

## Product Information

**Source**

Rabbit

**Isotype**

IgG

**Purification**

Affinity purification

**Storage**

Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.09% Sodium azide, 0.05% BSA, 50% glycerol, pH7.3.

Contact

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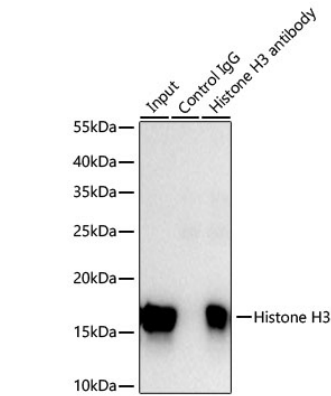
☎ | 400-999-6126

✉ | [cn.market@abclonal.com.cn](mailto:cn.market@abclonal.com.cn)

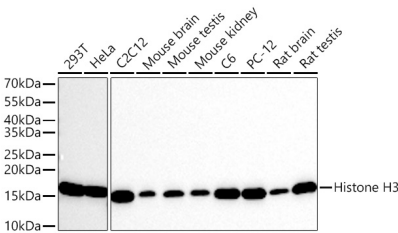
🌐 | [www.abclonal.com.cn](http://www.abclonal.com.cn)

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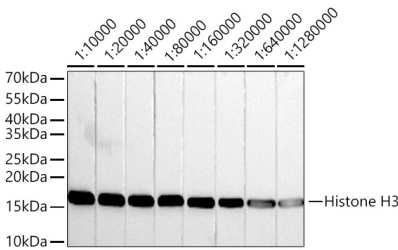
Validation Data



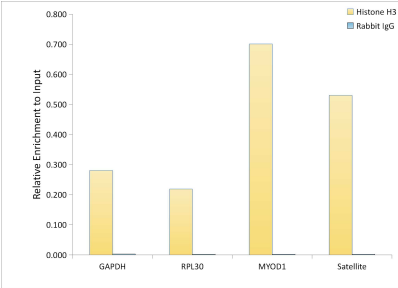
Immunoprecipitation of Histone H3 from 200 µg extracts of MCF7 cells was performed using 2 µg of Histone H3 Rabbit mAb (AC070). Rabbit Control IgG (AC005) was used to precipitate the Control IgG sample. IP samples were eluted with 1× Laemmli Buffer. The Input lane represents 10% of the total input. Western blot analysis of immunoprecipitates was conducted using Histone H3 Rabbit mAb (AC070) at a dilution of 1:5000.



Western blot analysis of various lysates using Histone H3 Rabbit mAb (AC070) at 1:160000 dilution incubated overnight at 4°C. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25 µg per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Exposure time: 20 s.



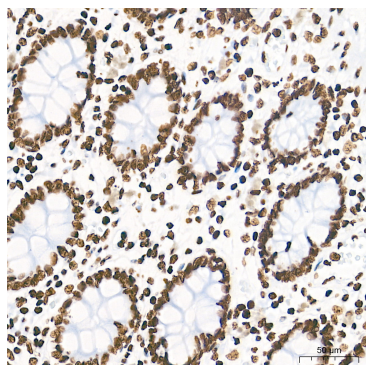
Western blot analysis of lysates from HeLa cells using Histone H3 Rabbit mAb (AC070) at 1:10000-1:1280000 dilution incubated overnight at 4°C. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25 µg per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Exposure time: 20 s.



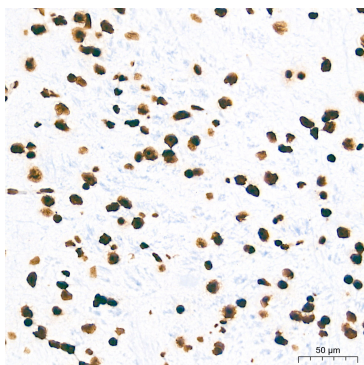
Chromatin immunoprecipitation was performed with 10 µg of cross-linked chromatin from HeLa, using 2 µg of Histone H3 Rabbit mAb (AC070) and Rabbit IgG isotype control (AC042). The enrichment of immunoprecipitated DNA at different genomic loci was examined by quantitative PCR. The histogram compares the ratio of the immunoprecipitated DNA to the input at given loci.

## Validation Data

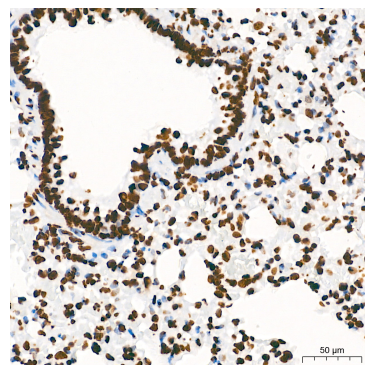
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Immunohistochemistry analysis of paraffin-embedded Human colon tissue using Histone H3 Rabbit mAb (AC070) at a dilution of 1:5500 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Mouse brain tissue using Histone H3 Rabbit mAb (AC070) at a dilution of 1:5500 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Rat lung tissue using Histone H3 Rabbit mAb (AC070) at a dilution of 1:5500 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.