

For Research Use Only

# Histone H4 Polyclonal antibody

Catalog Number: 16047-1-AP

Featured Product

43 Publications



## Basic Information

**Catalog Number:**  
16047-1-AP

**Size:**  
150ul, Concentration: 600 µg/ml by Nanodrop and 300 µg/ml by Bradford method using BSA as the standard;

**Source:**  
Rabbit

**Isotype:**  
IgG

**Immunogen Catalog Number:**  
AG8999

**GenBank Accession Number:**  
BC012587

**GeneID (NCBI):**  
8367

**Full Name:**  
histone cluster 1, H4e

**Calculated MW:**  
102 aa, 11 kDa

**Observed MW:**  
14 kDa, 11 kDa

**Purification Method:**  
Antigen affinity purification

**Recommended Dilutions:**  
WB 1:500-1:1000  
IP 0.5-4.0 ug for IP and 1:500-1:1000 for WB  
IHC 1:400-1:1600  
IF 1:20-1:200

## Applications

**Tested Applications:**  
ChIP, IF, IHC, IP, WB, ELISA

**Cited Applications:**  
ChIP, IF, IHC, IP, RIP, WB

**Species Specificity:**  
human, mouse, rat

**Cited Species:**  
bovine, human, mouse, pig, rat, yeast

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

**Positive Controls:**

**WB:** HeLa cells, rat thymus tissue, HepG2 cells, mouse kidney tissue, mouse thymus tissue, MCF-7 cells, HT-1080 cells

**IP:** HeLa cells,

**IHC:** mouse small intestine tissue, mouse colon tissue, human breast cancer tissue

**IF:** HeLa cells,

## Background Information

Histone H4 is a 103 amino acid protein, which belongs to the histone H4 family. Histone H4 localizes in the nucleus and is a 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.

## Notable Publications

Author	Pubmed ID	Journal	Application
Yan Sun	34564701	Cell Death Dis	IP
Liwei Weng	32978498	Sci Rep	WB,IP
Liangde Zheng	31525119	Autophagy	WB

## Storage

**Storage:**

Store at -20°C. Stable for one year after shipment.

**Storage Buffer:**

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

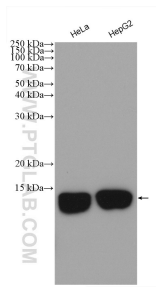
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

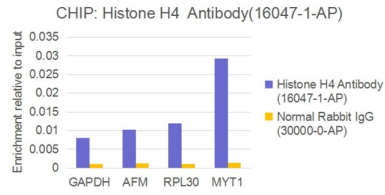
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**

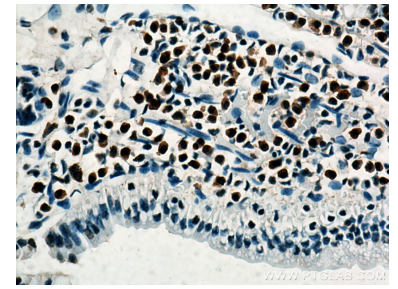
## Selected Validation Data



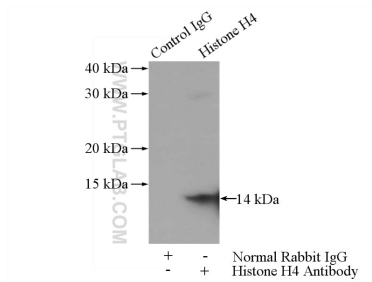
HeLa cells were subjected to SDS PAGE followed by western blot with 16047-1-AP (Histone H4 antibody) at dilution of 1:600 incubated at room temperature for 1.5 hours.



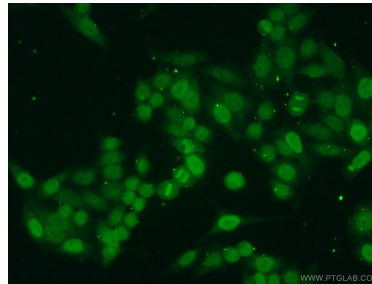
Chromatin was prepared from HEK-293 cells. The ChIP was performed with 10 µg of cross-linked chromatin, 5 µg of 16047-1-AP or Normal Rabbit IgG, and 60µl of Protein A sepharose beads. The immunoprecipitated DNA was quantified by real time PCR. Primers are located in the first kb of the transcribed region.



Immunohistochemical analysis of paraffin-embedded mouse small intestine tissue slide using 16047-1-AP (Histone H4 antibody) at dilution of 1:800 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP Result of anti-Histone H4 (IP:16047-1-AP, 3ug; Detection:16047-1-AP 1:600) with HeLa cells lysate 2000ug.



Immunofluorescent analysis of HeLa cells using 16047-1-AP (Histone H4 antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).