

For Research Use Only

Histone H4 Polyclonal antibody

Catalog Number: 16047-1-AP

Featured Product

67 Publications



Basic Information

Catalog Number:

16047-1-AP

Size:

150ul, Concentration: 600 ug/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG8999

GenBank Accession Number:

BC012587

GeneID (NCBI):

8367

UNIPROT ID:

P62805

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 1.0-3.0 mg of total protein lysate

IHC 1:400-1:1600

IF/ICC 1:200-1:800

Applications

Tested Applications:

WB, IHC, IF/ICC, FC (Intra), IP, ChIP, ELISA

Cited Applications:

WB, IHC, IF, IP, CoIP, ChIP, RIP

Species Specificity:

human, mouse, rat

Cited Species:

human, mouse, rat, pig, bovine, 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, HEK-293 cells, HepG2 cells, HT-1080 cells, MCF-7 cells, mouse kidney tissue, mouse thymus tissue, rat thymus tissue

IP: HeLa cells,

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

IF/ICC: 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

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

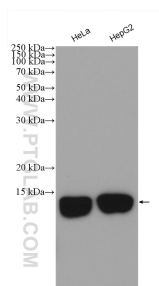
For technical support and original validation data for this product please contact:

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

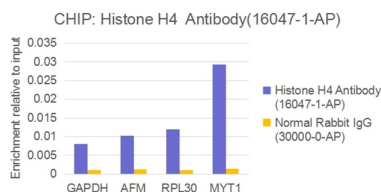
E: proteintech@ptglab.com
W: ptglab.com

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

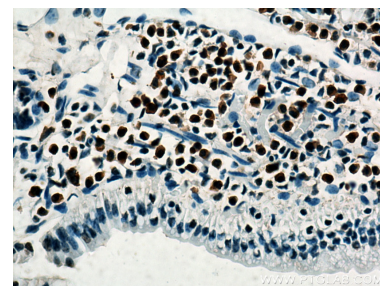
Selected Validation Data



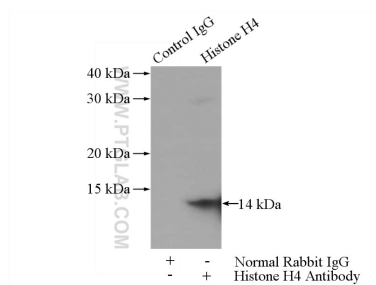
HeLa cells were subjected to SDS PAGE followed by western blot with 16047-1-AP (Histone H4 antibody) at dilution of 1:600 incubated at room temperature for 1.5 hours.



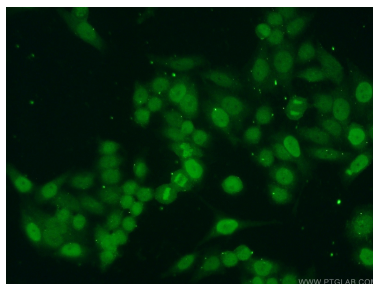
Chromatin was prepared from HEK-293 cells. The ChIP was performed with 10 µg of cross-linked chromatin, 5 µg of 16047-1-AP or Normal Rabbit IgG, and 60µl of Protein A sepharose beads. The immunoprecipitated DNA was quantified by real time PCR. Primers are located in the first kb of the transcribed region.



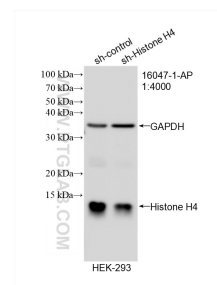
Immunohistochemical analysis of paraffin-embedded mouse small intestine tissue slide using 16047-1-AP (Histone H4 antibody) at dilution of 1:800 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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



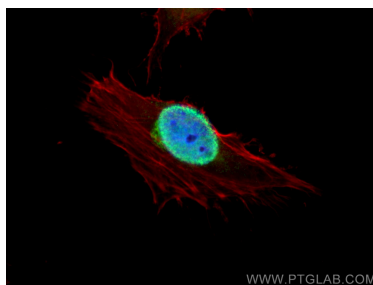
Immunofluorescent analysis of HeLa cells using 16047-1-AP (Histone H4 antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



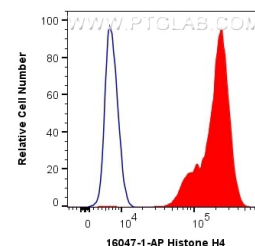
WB result of Histone H4 antibody (16047-1-AP; 1:4000; incubated at room temperature for 1.5 hours) with sh-Control and sh-Histone H4 transfected HEK-293 cells.



Immunofluorescent analysis of (-20°C Methanol) fixed HeLa cells using Histone H4 antibody (16047-1-AP) at dilution of 1:400 and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red).



Immunofluorescent analysis of (-20°C Methanol) fixed HeLa cells using Histone H4 antibody (16047-1-AP) at dilution of 1:400 and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red).



1X10⁶ HeLa cells were intracellularly stained with 0.4 µg Anti-Human Histone H4 (16047-1-AP) and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 µg Isotype Control. Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).