

For Research Use Only

# Histone H3 Polyclonal antibody

Catalog Number: 17168-1-AP

Featured Product

980 Publications



## Basic Information

### Catalog Number:

17168-1-AP

### Concentration:

1000 ug/ml

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG10644

### GenBank Accession Number:

BC015544

### GeneID (NCBI):

333932

### UNIPROT ID:

Q71DI3

### Full Name:

histone cluster 2, H3a

### Calculated MW:

136 aa, 15 kDa

### Observed MW:

15-17 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:2000-1:16000

IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC 1:50-1:500

IF/ICC 1:600-1:2400

## Applications

### Tested Applications:

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

### Cited Applications:

WB, IHC, IF, IP, CoIP, ChIP

### Species Specificity:

human, mouse, rat

### Cited Species:

human, canine, monkey, chicken, bovine, goat, fish, frog, arabidopsis, duck

**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** : HEK-293 cells, A549 cells, mouse skeletal muscle tissue, mouse liver tissue, mouse brain tissue, HeLa cells, HepG cells, MCF-7 cells, NIH/3T3 cells, mouse kidney tissue, rat kidney tissue

**IP** : MCF-7 cells,

**IHC** : human oesophagus cancer tissue, human skin cancer tissue, human breast cancer tissue

**IF/ICC** : HeLa cells,

## Background Information

Histone-H3, histone cluster 2, H3a is the core component of nucleosome. Nucleosomes wrap and compact DNA into chromatin, limiting DNA accessibility to the cellular machinery which requires 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. Histone-H3 is expressed during S phase; then expression strongly decreases as cell division slows down during the process of differentiation.

## Notable Publications

Author	Pubmed ID	Journal	Application
Yuqian Wang	32942847	J Agric Food Chem	WB
Dan-Qian Chen	33062239	Ther Adv Chronic Dis	WB
Jie Gao	34592151	Cell Rep	WB

## Storage

### Storage:

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

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

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

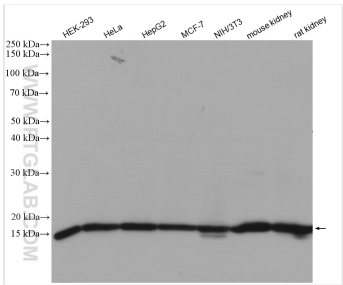
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

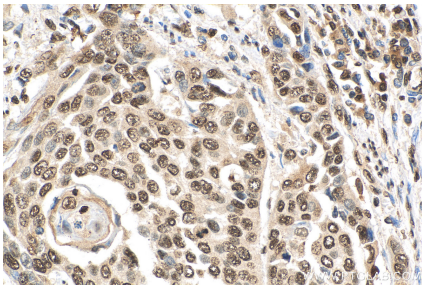
W: [ptgcn.com](http://ptgcn.com)

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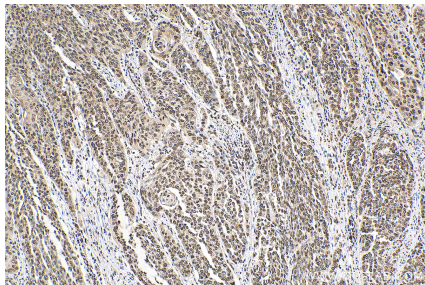
Selected Validation Data



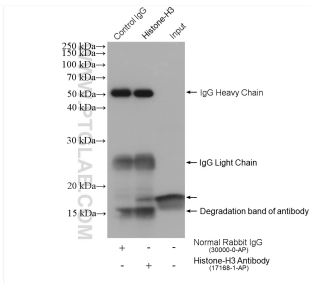
Various lysates were subjected to SDS PAGE followed by western blot with 17168-1-AP (Histone H3 antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



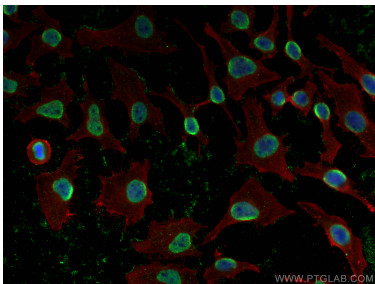
Immunohistochemical analysis of paraffin-embedded human oesophagus cancer tissue slide using 17168-1-AP (Histone H3 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



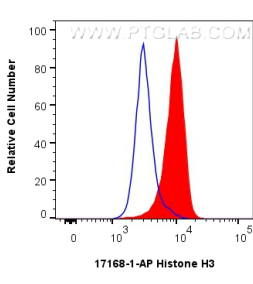
Immunohistochemical analysis of paraffin-embedded human oesophagus cancer tissue slide using 17168-1-AP (Histone H3 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP result of anti-Histone-H3 (IP:17168-1-AP, 4ug; Detection:17168-1-AP 1:8000) with MCF-7 cells lysate 2120 ug.



Immunofluorescent analysis of (-20°C Methanol) fixed HeLa cells using Histone H3 antibody (17168-1-AP) at dilution of 1:1200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), Beta Actin antibody (66009-1-Ig, Clone: 2D4H5, red).



1x10<sup>6</sup> HeLa cells were intracellularly stained with 0.25 ug Histone H3 Polyclonal antibody (17168-1-AP) and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.25 ug Rabbit IgG control Rabbit PolyAb (30000-O-AP) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).