

For Research Use Only

# Histone H3 Polyclonal antibody

Catalog Number: 17168-1-AP

Featured Product

987 Publications



## Basic Information

<b>Catalog Number:</b> 17168-1-AP	<b>GenBank Accession Number:</b> BC015544	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul, Concentration: 1000 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 333932	<b>Recommended Dilutions:</b> 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
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> Q71DI3	
<b>Isotype:</b> IgG	<b>Full Name:</b> histone cluster 2, H3a	
<b>Immunogen Catalog Number:</b> AG10644	<b>Calculated MW:</b> 136 aa, 15 kDa	
	<b>Observed MW:</b> 15-17 kDa	

## 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, mouse, rat, pig, monkey, chicken, goat, fish, arabidopsis, yellow catfish

**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

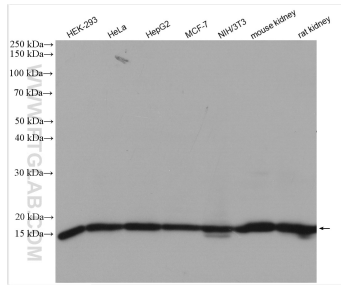
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol, pH7.3  
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

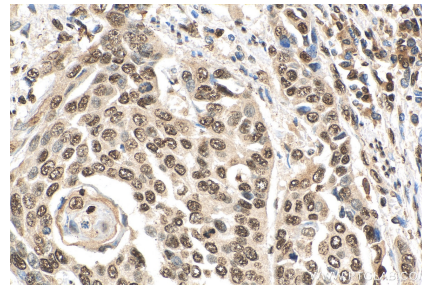
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

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

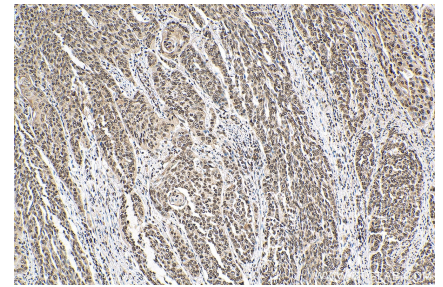
## Selected Validation Data



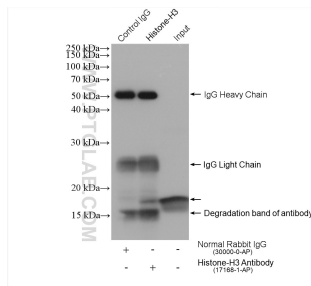
Various lysates were subjected to SDS PAGE followed by western blot with 17168-1-AP (Histone H3 antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



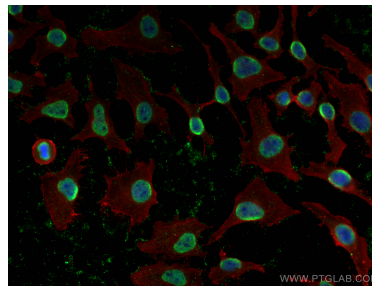
Immunohistochemical analysis of paraffin-embedded human oesophagus cancer tissue slide using 17168-1-AP (Histone H3 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



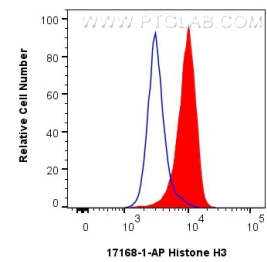
Immunohistochemical analysis of paraffin-embedded human oesophagus cancer tissue slide using 17168-1-AP (Histone H3 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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).



$1 \times 10^6$  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 (30000-0-AP) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).