

For Research Use Only

Histone H3 Polyclonal antibody

Catalog Number: 17168-1-AP

Featured Product

1051 Publications



Basic Information

Catalog Number:

17168-1-AP

Size:

150ul, Concentration: 1000 ug/ml by Nanodrop;

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

FC (Intra): 0.25 ug per 10⁶ cells in a 100 µl suspension

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,

FC (Intra): 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

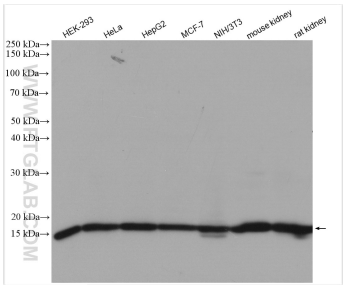
For technical support and original validation data for this product please contact:

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

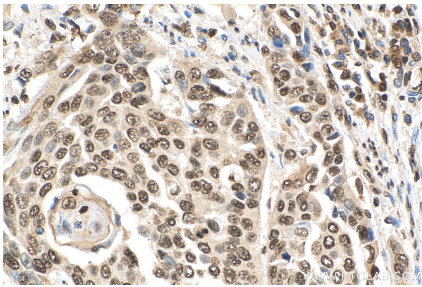
E: proteintech@ptglab.com
W: ptglab.com

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

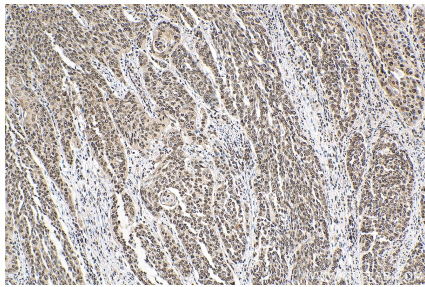
Selected Validation Data



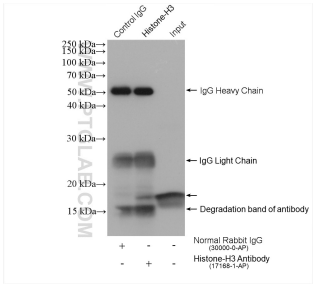
Various lysates were subjected to SDS PAGE followed by western blot with 17168-1-AP (Histone H3 antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



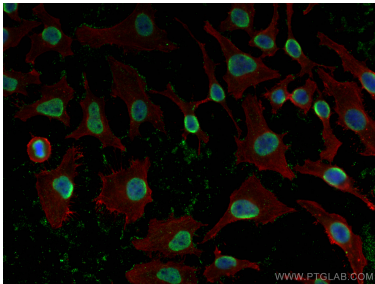
Immunohistochemical analysis of paraffin-embedded human oesophagus cancer tissue slide using 17168-1-AP (Histone H3 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



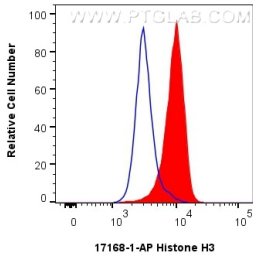
Immunohistochemical analysis of paraffin-embedded human oesophagus cancer tissue slide using 17168-1-AP (Histone H3 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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).



1x10⁶ 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).