For Research Use Only

Histone-H3 Polyclonal antibody

Catalog Number:17168-1-AP 781 Publications

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Basic Information

Catalog Number:
17168-1-AP

Size:
500 μg/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 1:600-1:2400

Applications

Tested Applications:
FC, IF/ICC, IHC, IP, WB, ELISA

Cited Applications:
ChIP, CoIP, IF, IHC, IP, WB

Species Specificity:
human, mouse, rat

Cited Species:
human, goat, chicken, rat, Arabidopsis, yellow catfish, mouse, monkey, fish, pig

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 : 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

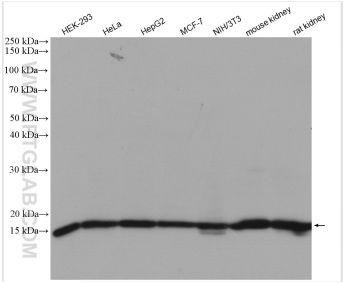
Author	Pubmed ID	Journal	Application
Yuqian Wang	32942847	J Agric Food Chem	WB
Dan-Qian Chen	33062239	Ther Adv Chronic Dis	WB
Jie Gao	34592151	Cell Rep	WB

Storage

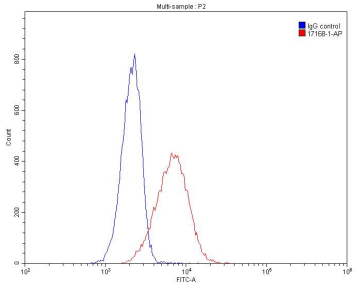
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

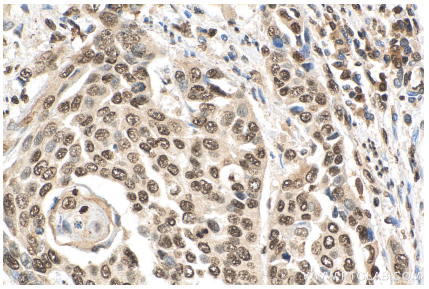
Selected Validation Data



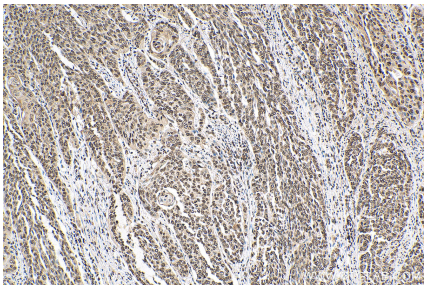
Various lysates were subjected to SDS PAGE followed by western blot with 17168-1-AP (Histone-H3 antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



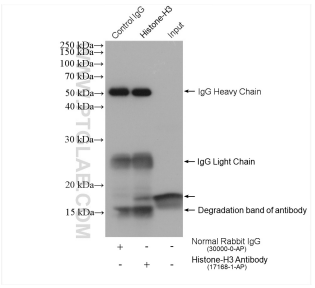
1X10^6 HeLa cells were stained with 0.20ug Histone-H3 antibody (17168-1-AP, red) and control antibody (blue). Fixed with 90% MeOH.



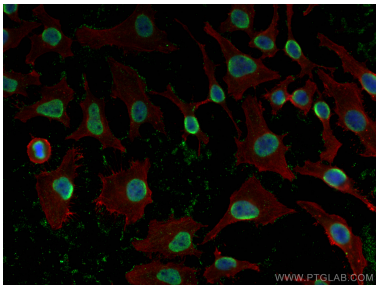
Immunohistochemical analysis of paraffin-embedded human oesophagus cancer tissue slide using 17168-1-AP (Histone-H3 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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).