For Research Use Only

Histone H2A.X Polyclonal antibody

Catalog Number:10856-1-AP 136 Publications

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Basic Information

Catalog Number:
10856-1-AP

Size:
150ul , Concentration: 800 ug/ml by Nanodrop;

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG1305

GenBank Accession Number:
BC013416

GeneID (NCBI):
3014

UNIPROT ID:
P16104

Full Name:
H2A histone family, member X

Calculated MW:
15 kDa

Observed MW:
15-18 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:1000-1:4000
IHC 1:50-1:500
IF/ICC 1:1000-1:4000

Applications

Tested Applications:
WB, IHC, IF/ICC, ChIP, ELISA

Cited Applications:
WB, IHC, IF, ChIP

Species Specificity:
human, mouse, rat

Cited Species:
human, mouse, rat, 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, HL-60 cells, HEK-293 ells, mouse heart, mouse kidney, rat kidney

IHC : human lymphoma tissue,

IF/ICC : MCF-7 cells, U-251 cells, U2OS cells

Background Information

Histone H2A.X belongs to the histone H2A family, which is synthesized in G1 and S phase. It is involved in nucleosomal organization of chromatin together with other histone proteins, and is specially important for recombination between immunoglobulin switch regions. H2A.X becomes phosphorylated on serine 139 (to form gamma-H2AFX or H2AX139ph) in response to DNA double strand breaks (DSBs) generated by exogenous genotoxic agents and by stalled replication forks, which promotes DNA repair and maintains genomic stability. The calculated molecular weight of H2AX is 15 kDa, but the ubiquitinated H2A.X is about 22 kDa.

Notable Publications

Author	Pubmed ID	Journal	Application
Yong-Li Zhang	34679694	Antioxidants (Basel)	IF
Julia A Yaglom	25252808	Oncotarget	IHC
Daosen Chen	34659557	J Cancer	WB

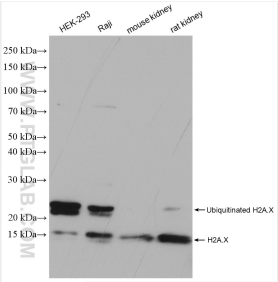
Storage

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

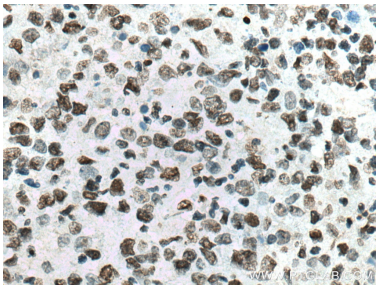
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

Selected Validation Data

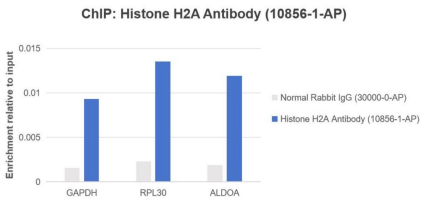


Various lysates were subjected to SDS PAGE followed by western blot with 10856-1-AP (Histone H2A.X antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.

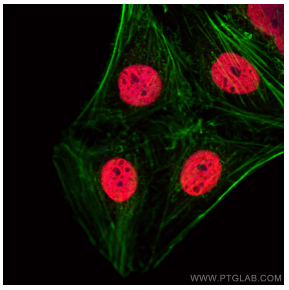
Immunohistochemical analysis of paraffin-embedded human lymphoma tissue slide using 10856-1-AP (Histone H2A.X antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



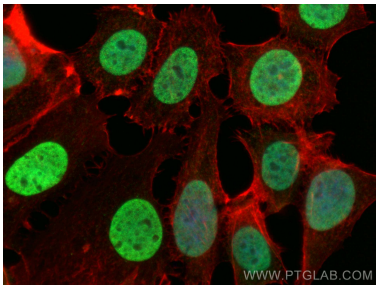
Immunohistochemical analysis of paraffin-embedded human lymphoma tissue slide using 10856-1-AP (Histone H2A.X antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Chromatin was prepared from HEK-293 cells, cells were fixed with formaldehyde for 10 minutes. The ChIP was performed with 18 µg of cross-linked chromatin, 5 µg of Histone H2A Antibody (10856-1-AP) or 5 ug of Normal Rabbit IgG (30000-0-AP), and 30 µl of Protein A Magarose Beads. The immunoprecipitated DNA was quantified by real time PCR. Primers are located in the first kb of the transcribed region.



Immunofluorescent analysis of (4% PFA) fixed U2OS cells using Histone H2A.X antibody (10856-1-AP) at dilution of 1:400 and CoraLite®594-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-4), CL488-Phalloidin (green).



Immunofluorescent analysis of (4% PFA) fixed MCF-7 cells using Histone H2A.X antibody (10856-1-AP) at dilution of 1:2000 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-phalloidin (red).