

Histone H2A.X Polyclonal Antibody

Catalog No: YT2155

Reactivity: Human; Mouse; Rat

Applications: WB;IHC;IF;CoIP;ELISA

Target: Histone H2A.X

Fields: >>Necroptosis;>>Neutrophil extracellular trap

formation;>>Alcoholism;>>Systemic lupus erythematosus

Gene Name: H2AFX

Protein Name: Histone H2A.x

Human Gene Id: 3014

Human Swiss Prot

No:

Mouse Gene Id: 15270

Mouse Swiss Prot

No:

Immunogen: The antiserum was produced against synthesized peptide derived from human

Histone H2A.X. AA range:94-143

Specificity: Histone H2A.X Polyclonal Antibody detects endogenous levels of Histone H2A.X

protein.

P16104

P27661

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

Dilution: WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. IP 1:200-500, ELISA:

1:10000. Not yet tested in other applications.

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.



Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 19kD

Cell Pathway : Protein_Acetylation

Background: Histones are basic nuclear proteins that are responsible for the nucleosome

structure of the chromosomal fiber in eukaryotes. Two molecules of each of the four core histones (H2A, H2B, H3, and H4) form an octamer, around which approximately 146 bp of DNA is wrapped in repeating units, called nucleosomes. The linker histone, H1, interacts with linker DNA between nucleosomes and functions in the compaction of chromatin into higher order structures. This gene encodes a replication-independent histone that is a member of the histone H2A family, and generates two transcripts through the use of the conserved stem-loop termination motif, and the polyA addition motif. [provided by RefSeq, Oct 2015],

Function: developmental stage:Synthesized in G1 as well as in S-phase.,domain:The

[ST]-Q motif constitutes a recognition sequence for kinases from the

PI3/PI4-kinase family.,function:Variant histone H2A which replaces conventional H2A in a subset of nucleosomes. Nucleosomes wrap and compact DNA into chromatin, limiting DNA accessibility to the cellular machineries which require 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. Required for checkpoint-mediated arrest of cell cycle progression in response to low doses of ionizing radiation and for efficient repair of DNA double strand breaks (DSBs)

specifically when modified by C-terminal phosphorylation.,PTM:Mon

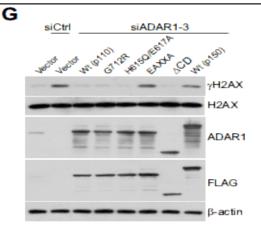
Subcellular Location:

Nucleus . Chromosome .

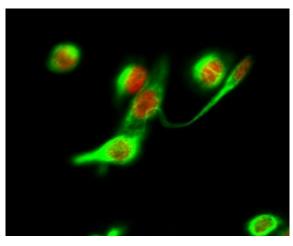
Expression: Lung, Placenta,

Products Images

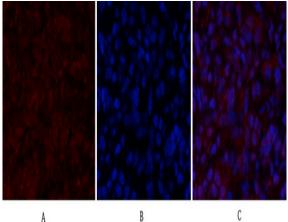
2/5



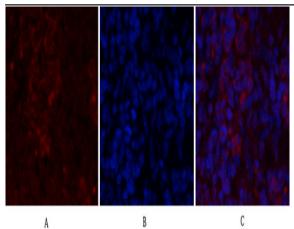
ADAR1 links R-loop homeostasis to ATR activation in replication stress response. NUCLEIC ACIDS RESEARCH Lei Shi WB,ColP Human HeLa cell



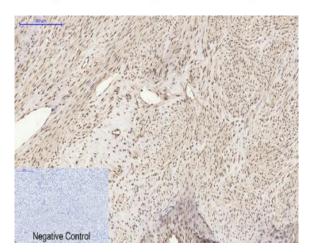
Immunofluorescence analysis of Hela cell. 1,Histone H2A.X Polyclonal Antibody(red) was diluted at 1:200(4° overnight). LC3B Polyclonal Antibody(green) was diluted at 1:200(4° overnight). 2, Goat Anti Rabbit Alexa Fluor 594 Catalog:RS3611 was diluted at 1:1000(room temperature, 50min). Goat Anti Mouse Alexa Fluor 488 Catalog:RS3208 was diluted at 1:1000(room temperature, 50min).



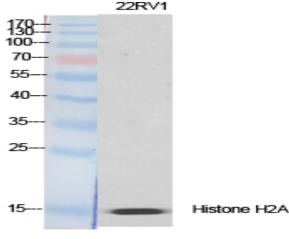
Immunofluorescence analysis of rat-lung tissue. 1, Histone H2A.X Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



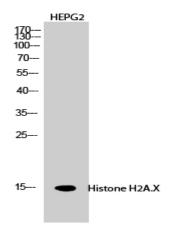
Immunofluorescence analysis of rat-spleen tissue. 1,Histone H2A.X Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



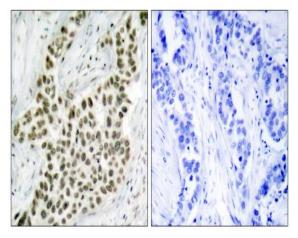
Immunohistochemical analysis of paraffin-embedded Humanuterus tissue. 1,Histone H2A.X Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



Western Blot analysis of various cells using Histone H2A.X Polyclonal Antibody diluted at 1:2000 cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003,Inventbiotech,MN,USA).



Western Blot analysis of HEPG2 cells using Histone H2A.X Polyclonal Antibody diluted at 1:2000 cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003,Inventbiotech,MN,USA).



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue, using Histone H2A.X Antibody. The picture on the right is blocked with the synthesized peptide.