

Histone H2A.X (Ser139) Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP20703b

Specification

Histone H2A.X (Ser139) Antibody - Product Information

Application WB,E
Primary Accession P16104
Reactivity Human
Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG

Histone H2A.X (Ser139) Antibody - Additional Information

Gene ID 3014

Other Names

Histone H2AX, H2a/x, Histone H2AX, H2AFX, H2AX

Target/Specificity

This antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 134-163 amino acids from human.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Histone H2A.X (Ser139) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Histone H2A.X (Ser139) Antibody - Protein Information

Name H2AX (HGNC:4739)

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.

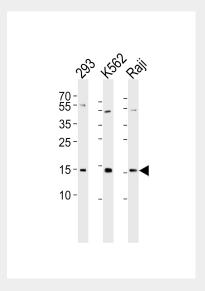
Cellular LocationNucleus. Chromosome

Histone H2A.X (Ser139) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

Histone H2A.X (Ser139) Antibody - Images



Western blot analysis of lysates from 293, K562, Raji cell line (from left to right), using Histone H2A. X (Ser139)Cat. #AP20703b). AP20703b was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysates at 35ug per lane.

Histone H2A.X (Ser139) Antibody - Background

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.



Histone H2A.X (Ser139) Antibody - References

Mannironi C.,et al.Nucleic Acids Res. 17:9113-9126(1989). Ebert L.,et al.Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases. Rogakou E.P.,et al.J. Biol. Chem. 273:5858-5868(1998). Rogakou E.P.,et al.J. Cell Biol. 146:905-916(1999). Paull T.T.,et al.Curr. Biol. 10:886-895(2000).