

**Histone H2A.X (Ser139) Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP20702b**

## Specification

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### Histone H2A.X (Ser139) Antibody - Product Information

Application	WB,E
Primary Accession	<a href="#">P16104</a>
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

#### 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 Location

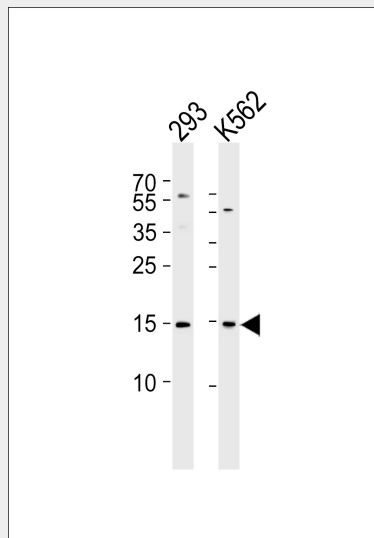
Nucleus. Chromosome

### 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](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Histone H2A.X (Ser139) Antibody - Images



Western blot analysis of lysates from 293, K562 cell line (from left to right), using Histone H2A.X (Ser139)(Cat. #AP20702b). AP20702b 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).  
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Paul T.T., et al. *Curr. Biol.* 10:886-895(2000).