

# Histone H2A.X (Ser139) Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP20702b

#### **Product Information**

Application WB, E Primary Accession P16104

**Reactivity** Human, Mouse

HostRabbitClonalityPolyclonalIsotypeRabbit IgGClone NamesRB43838Calculated MW15145

#### **Additional Information**

Gene ID 3014

Other Names Histone H2AX, H2a/x, Histone H2AX, H2AFX, H2AFX

**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.

#### **Protein Information**

**Name** H2AX ( <u>HGNC:4739</u>)

**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

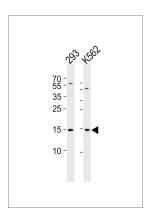
## **Background**

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.

### 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).

## **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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.