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Histone H2A.X (Ser139) Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20702b

Product Information

Application	WB, E
Primary Accession	P16104
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB43838
Calculated MW	15145

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.

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

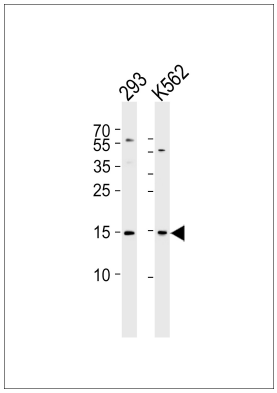
Background

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

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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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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'.