Datasheet for ABIN6971765

anti-H2AFX antibody (pSer139)

3 Images

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Overview

Quantity:	100 µg
Target:	H2AFX
Binding Specificity:	pSer139
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This H2AFX antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF), Immunocytochemistry (ICC)

Product Details

Immunogen:	This Histone H2AX phospho Ser139 antibody was raised against a peptide including phosphoserine 139 of histone H2AX.
Isotype:	IgG
Characteristics:	Histone H2AX phospho Ser139 (H2AX, H2A histone family member X) replaces conventional H2A in a subset of nucleosomes. Nucleosomes wrap and compact DNA into chromatin, limiting DNA accessibility to the cellular machineries that require DNA as a template. Histones thereby play a central role in transcriptional regulation, DNA repair, DNA replication and chromosomal stability. DNA accessibility is regulated via a complex set of post-translational modifications of histones, also called the histone code, and nucleosome remodeling. Histone H2AX is 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.XS139ph antibody (pAb) (H2AX) was

Product Details

	raised in a Rabbit host. It has been validated for use in Immunocytochemistry, Immunofluorescence and Western blot, it has been shown to react with Human samples, but it is predicted that it will react with a wide range of sample types.
Purification:	Protein A Chromatography

Target Details

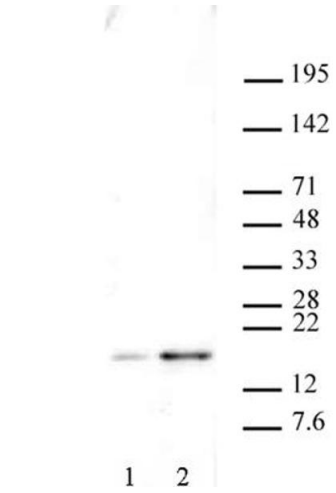
Target:	H2AFX
Alternative Name:	Histone H2A.X (H2AFX Products)
Molecular Weight:	15 kDa
NCBI Accession:	NP_002096
Pathways:	Telomere Maintenance, DNA Damage Repair, Positive Regulation of Response to DNA Damage Stimulus

Application Details

Application Notes:	Optimal working dilution should be determined by the investigator.
Restrictions:	For Research Use only

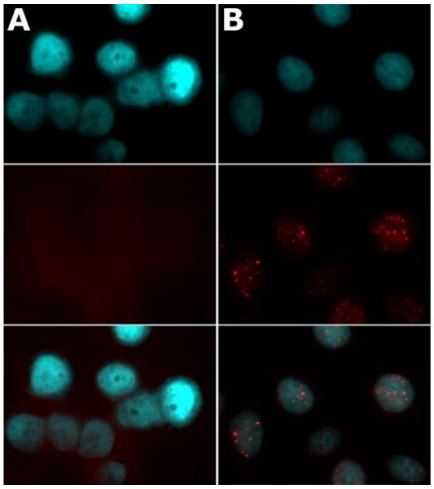
Handling

Buffer:	10 mM sodium phosphate pH 7.5, 150 mM NaCl, 30 % glycerol, 0.035 % sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Avoid repeated freeze/thaw cycles by aliquoting items into single-use fractions for storage at -20°C for up to 2 years. Keep all reagents on ice when not in storage.



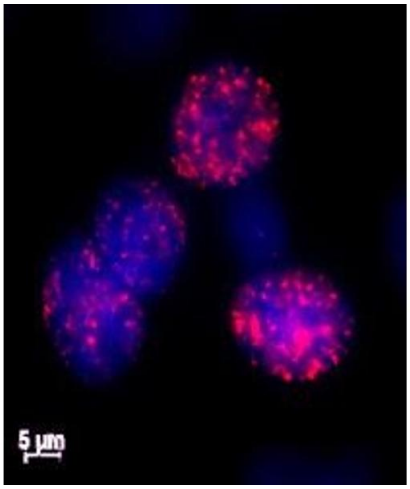
Western Blotting

Image 1. Histone H2AX phospho Ser139 antibody tested by Western blot. Western blot: Nuclear extract of U2OS cells (20 µg per lane) probed with Histone H2AX phospho Ser139 polyclonal antibody (1:500 dilution). Lane 1: untreated cells Lane 2: cells treated with camptothecin



Immunofluorescence

Image 2. Histone H2AX phospho Ser139 antibody tested by immunofluorescence. HeLa cells stained with Histone H2AX phospho Ser139 antibody (1:500 dilution) using MAX Stain Immunofluorescence Tools. The HeLa cells were blocked with MAXblock Blocking Medium and stained with Histone H2AX phospho Ser139 antibody. Panel A: Untreated HeLa cells. Panel B: Cells fixed and stained 90 minutes after 3 Gy ionizing radiation treatment. Top images: Cells were stained with DAPI. Middle images: Same cells stained with Histone H2AX phospho Ser139 antibody. Bottom images: Merge of both images above. Images were made using Zeiss Axiovision with equivalent acquisition settings for direct comparison. Note Panel B-middle image, which shows intense nuclear clustering of ionizing radiation-induced phosphorylation of Ser139 of H2AX. In contrast, Panel A-middle image shows no detectable phosphorylated H2AX.



Immunofluorescence

Image 3. Histone H2AX phospho Ser139 antibody tested by immunofluorescence. Etoposide-treated HeLa cells stained with ABIN6971765 (1:500 dilution, red) and counterstained with DAPI (blue).