

Histone H2A.X Polyclonal Antibody

Catalog # AP70337

Product Information

Application WB, IHC-P, IF
Primary Accession P16104
Reactivity Human
Host Rabbit
Clonality Polyclonal
Calculated MW 15145

Additional Information

Gene ID 3014

Other Names H2AFX; H2AX; Histone H2A.x; H2a/x

Dilution WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300.

Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other

applications. IHC-P~~N/A IF~~1:50~200

Format Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium

azide.

Storage Conditions -20°C

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.

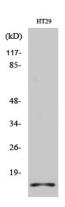
Cellular Location Nucleus. Chromosome

Background

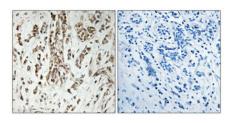
Variant histone H2A which replaces conventional H2A in a subset of nucleosomes. Nucleosomes wrap and

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.

Images



Western Blot analysis of various cells using Histone H2A.X Polyclonal Antibody diluted at 1: 1000 cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003,Inventbiotech,MN,USA).



Immunohistochemical analysis of paraffin-embedded Human breast cancer. Antibody was diluted at 1:100(4°,overnight). High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negetive contrl (right) obtaned from antibody was pre-absorbed by immunogen peptide.

Citations

• Isochamaejasmin induces toxic effects on Helicoverpa zea via DNA damage and mitochondria-associated apoptosis

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