ARG57231
anti-Histone H2A.X phospho (Ser139) antibody [RM224]

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Monoclonal antibody [RM224] recognizes Histone H2A.X phospho (Ser139)
Tested Reactivity	Hu
Tested Application	ICC/IF, WB
Specificity	This antibody reacts to Histone H2A.X only when phosphorylated at serine 139. No cross reactivity with other phosphorylated histones.
Host	Rabbit
Clonality	Monoclonal
Clone	RM224
Isotype	IgG
Target Name	Histone H2A.X
Antigen Species	Others
Immunogen	A phospho-peptide corresponding to Phospho-Histone H2AX (Ser139).
Conjugation	Un-conjugated
Alternate Names	H2AX; H2a/x; H2A.X; Histone H2AX; H2A/X; Histone H2A.X; gamma H2AX; gamma H2A.X

Application Instructions

Application table

Application	Dilution
ICC/IF	0.5 - 2 µg/ml
WB	0.5 - 2 µg/ml

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

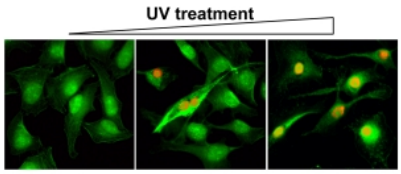
Form	Liquid
Purification	Purification with Protein A.
Buffer	PBS, 0.09% Sodium azide, 50% Glycerol and 1% BSA.
Preservative	0.09% Sodium azide
Stabilizer	50% Glycerol and 1% BSA
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

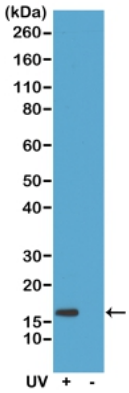
Database links	GeneID: 3014 Human Swiss-port # P16104 Human
Gene Symbol	H2AFX
Gene Full Name	H2A histone family, member X
Background	Histones are basic nuclear proteins that are responsible for the nucleosome structure of the chromosomal fiber in eukaryotes. Two molecules of each of the four core histones (H2A, H2B, H3, and H4) form an octamer, around which approximately 146 bp of DNA is wrapped in repeating units, called nucleosomes. The linker histone, H1, interacts with linker DNA between nucleosomes and functions in the compaction of chromatin into higher order structures. This gene encodes a member of the histone H2A family, and generates two transcripts through the use of the conserved stem-loop termination motif, and the polyA addition motif. [provided by RefSeq, Jul 2008]
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. [UniProt]
Highlight	Related products: Histone H2A.X antibodies; Anti-Rabbit IgG secondary antibodies; Related news: Senescence Marker Antibody Panel is launched

Images



ARG57231 anti-Histone H2A.X phospho (Ser139) antibody [RM224] ICC/IF image

Immunofluorescence: HeLa cells stained with ARG57231 anti-Histone H2A.X phospho (Ser139) antibody [RM224] (red). Actin filaments have been labeled with fluorescein phalloidin (green).



ARG57231 anti-Histone H2A.X phospho (Ser139) antibody [RM224] WB image

Western blot: Acid extracts of HeLa cells treated or non-treated with UV, stained with ARG57231 anti-Histone H2A.X phospho (Ser139) antibody [RM224] at 0.5 µg/ml, showed a band of Histone H2A.X phosphorylatedat serine 139 in HeLa cells.