

# H2AFX Antibody (N-term)

Mouse Monoclonal Antibody (Mab)

Catalog # AM2202b

## Product Information

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<b>Application</b>	WB, IHC-P, E
<b>Primary Accession</b>	<a href="#">P16104</a>
<b>Other Accession</b>	<a href="#">P27661</a> , <a href="#">Q7ZUY3</a>
<b>Reactivity</b>	Human
<b>Predicted</b>	Zebrafish, Mouse
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Isotype</b>	IgG1
<b>Clone Names</b>	980CT1.5.5
<b>Calculated MW</b>	15145
<b>Antigen Region</b>	1-30

## Additional Information

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<b>Gene ID</b>	3014
<b>Other Names</b>	Histone H2AX, H2a/x, Histone H2AX, H2AFX, H2AX
<b>Target/Specificity</b>	This H2AFX antibody is generated from mice immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human H2AFX.
<b>Dilution</b>	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
<b>Format</b>	Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.
<b>Storage</b>	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.
<b>Precautions</b>	H2AFX Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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<b>Name</b>	H2AX ( <a href="#">HGNC:4739</a> )
<b>Function</b>	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

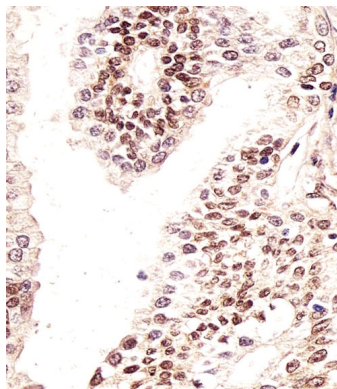
## Background

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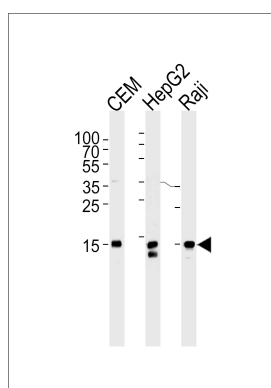
## References

- Stewart G.S., et al. Nature 421:961-966(2003).  
Park E.-J., et al. Nucleic Acids Res. 31:6819-6827(2003).  
Stiff T., et al. Cancer Res. 64:2390-2396(2004).  
Lukas C., et al. EMBO J. 23:2674-2683(2004).  
Kurz E.U., et al. J. Biol. Chem. 279:53272-53281(2004).

## Images



Immunohistochemical analysis of paraffin-embedded H. prostate section using H2AFX Antibody (N-term)(Cat#AM2202b). AM2202b was diluted at 1:25 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.



H2AFX Antibody (N-term) (Cat. #AM2202b) western blot analysis in CEM,HepG2,Raji cell line lysates (35µg/lane).This demonstrates the H2AFX antibody detected the H2AFX protein (arrow).

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