

**H2AFX Antibody (N-term)**  
**Mouse Monoclonal Antibody (Mab)**  
**Catalog # AM2202b**

**Specification**

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**H2AFX Antibody (N-term) - Product Information**

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

**H2AFX Antibody (N-term) - Additional Information**

**Gene ID** 3014

**Other Names**

Histone H2AX, H2a/x, Histone H2AX, H2AFX, H2AX

**Target/Specificity**

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.

**Dilution**

WB~~1:1000

IHC-P~~1:25

**Format**

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.

**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**

H2AFX Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**H2AFX Antibody (N-term) - 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**

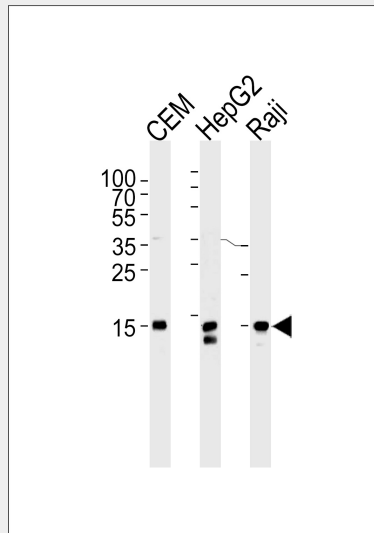
Nucleus. Chromosome

#### **H2AFX Antibody (N-term) - Protocols**

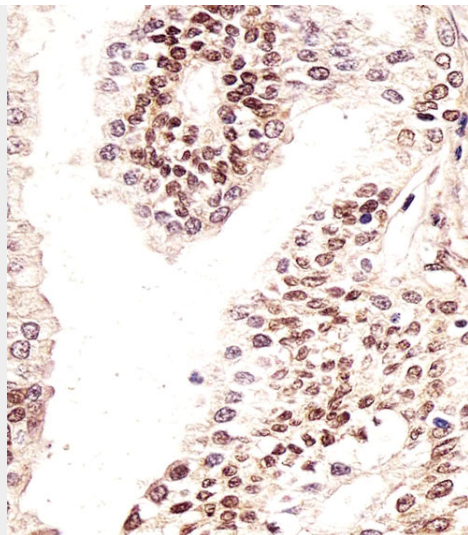
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### **H2AFX Antibody (N-term) - Images**



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).



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) - 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.

#### **H2AFX Antibody (N-term) - 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).