

**H2AFX Antibody (C-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP13716b**

**Specification**

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

Application	WB, IHC-P,E
Primary Accession	<a href="#">P16104</a>
Other Accession	<a href="#">NP_002096.1</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	15145
Antigen Region	111-140

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

**Gene ID** 3014

**Other Names**

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

**Target/Specificity**

This H2AFX antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 111-140 amino acids from the C-terminal region of human H2AFX.

**Dilution**

WB~~1:1000  
IHC-P~~1:10~50

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**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 (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**H2AFX Antibody (C-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

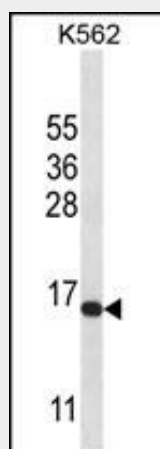
Nucleus. Chromosome

#### H2AFX Antibody (C-term) - Protocols

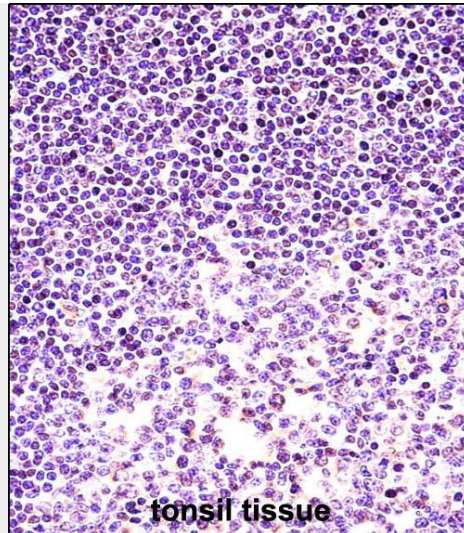
Provided below are standard protocols that you may find useful for product applications.

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

#### H2AFX Antibody (C-term) - Images



H2AFX Antibody (C-term) (Cat. #AP13716b) western blot analysis in K562 cell line lysates (35ug/lane). This demonstrates the H2AFX antibody detected the H2AFX protein (arrow).



H2AFX Antibody (C-term) (Cat. #AP13716b) immunohistochemistry analysis in formalin fixed and paraffin embedded human tonsil tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of H2AFX Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

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

#### **H2AFX Antibody (C-term) - References**

Roch-Lefevre, S., et al. *Radiat. Res.* 174(2):185-194(2010)  
Schmid, T.E., et al. *Int. J. Radiat. Biol.* 86(8):682-691(2010)  
Jiang, X., et al. *FEBS Lett.* 584(13):2926-2930(2010)  
Vasireddy, R.S., et al. *Br. J. Cancer* 102(10):1511-1518(2010)  
Ikeda, M., et al. *Int. J. Oncol.* 36(5):1081-1088(2010)