

**H2AFX Antibody (C-term) Blocking peptide**  
**Synthetic peptide**  
**Catalog # BP13716b****Specification**

---

**H2AFX Antibody (C-term) Blocking peptide - Product Information**Primary Accession [P16104](#)**H2AFX Antibody (C-term) Blocking peptide - Additional Information****Gene ID** 3014**Other Names**

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

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody AP13716b was selected from the C-term region of H2AFX. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**H2AFX Antibody (C-term) Blocking peptide - 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) Blocking peptide - Protocols**

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

- [Blocking Peptides](#)

## **H2AFX Antibody (C-term) Blocking peptide - Images**

## **H2AFX Antibody (C-term) Blocking peptide - 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) Blocking peptide - 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)