

## Product datasheet for **AP20846PU-M**

### Histone H2A.X (H2AFX) pSer139 Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	<b>Western blot:</b> 1/500-1/1000. <b>Immunohistochemistry on Paraffin Sections:</b> 1/50-1/200.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Specificity:	This antibody detects endogenous levels of Histone H2A.X protein only when phosphorylated at Serine 139.
Formulation:	Phosphate buffered saline (PBS), pH~7.2 State: Aff - Purified State: Liquid purified Ig fraction (> 95% pure by SDS-PAGE). Preservative: 0.05% Sodium Azide
Concentration:	1.0 mg/ml
Purification:	Affinity Chromatography using epitope-specific immunogen.
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	~ 15 kDa
Gene Name:	H2A histone family member X
Database Link:	<u><a href="#">Entrez Gene 15270 Mouse</a></u> <u><a href="#">Entrez Gene 500987 Rat</a></u> <u><a href="#">Entrez Gene 3014 Human</a></u> <u><a href="#">P16104</a></u>



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**Background:**

Histone H2A.X is a member of the Histone H2A family, which is involved in nucleosomal organization of chromatin. The Histone H2A.X gene is located in close proximity to the porphobilinogen deaminase (PBGD) gene in both mouse and human, and maps to 9 A5.2 and 11q23.3, respectively. H2A.X differs from the other members of the H2A family by the presence of a highly conserved C-terminal motif. It is rapidly phosphorylated in response to ionizing radiation and plays an important role in the recognition and repair of DNA double stranded breaks. The phosphorylated form of H2A.X, designated  $\gamma$ -H2A.X, forms nuclear foci at the heavy chain constant region of cells involved in class switch recombination (CSR), a region-specific DNA reaction that replaces one immunoglobulin heavy chain constant region gene with another. The phosphorylated gamma-H2A.X is also thought to initiate subsequent repair factors, including Rad50, Rad51 and BRCA1.

**Synonyms:**

H2a/x, H2AFX, H2AX

**Protein Families:**

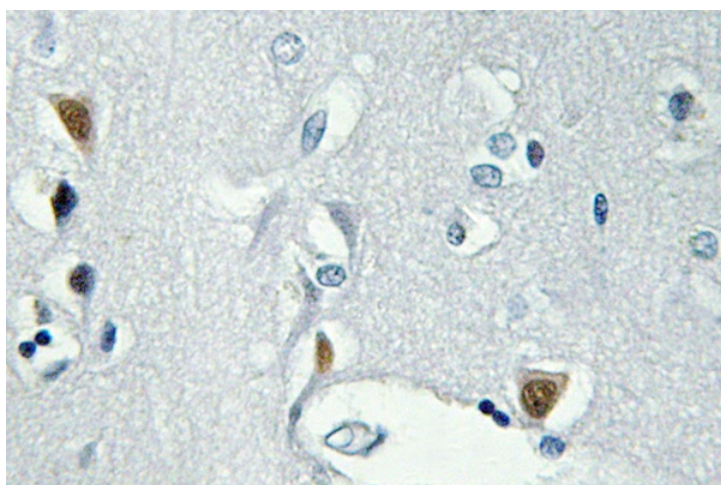
Druggable Genome

**Protein Pathways:**

Systemic lupus erythematosus

**Product images:**


Western blot (WB) analysis of p-Histone H2A.X antibody (Cat.-No.: [AP20846PU-N]) in extracts from 293 neocarcinostatin cells



Immunohistochemistry (IHC) analyzes of p-Histone H2A.X antibody (Cat.-No.: [AP20846PU-N]) in paraffin-embedded human brain tissue.