

### 35-1247: Polyclonal Antibody to Histone H2A.X (Phospho-Ser139)

<b>Clonality :</b>	Polyclonal
<b>Application :</b>	WB,IF
<b>Reactivity :</b>	Human
<b>Gene :</b>	H2AFX
<b>Gene ID :</b>	3014
<b>Uniprot ID :</b>	P16104
<b>Format :</b>	Purified
<b>Alternative Name :</b>	H2A.X, H2AFX, H2a/x, HIST5-2AX
<b>Isotype :</b>	Rabbit IgG
<b>Immunogen Information :</b>	Peptide sequence around phosphorylation site of serine 139 (Q-A-S(p)-Q-E) derived from Human Histone H2A.X.

#### Description

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. Yaneva M, et al. (2005) Nucleic Acids Res. 33(16): 5320-5330. Tsukuda T, et al.(2006) Nature. Author manuscript; available in PMC 2006 March 6.

#### Product Info

<b>Amount :</b>	50 µl / 100 µl
<b>Content :</b>	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg <sup>2+</sup> and Ca <sup>2+</sup> ), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
<b>Storage condition :</b>	Store the antibody at 4°C, stable for 6 months. For long-term storage, store at -20°C. Avoid repeated freeze and thaw cycles.

#### Application Note

Predicted MW: 15kd, Western blotting: 1:500~1:1000, Immunofluorescence: 1:100~1:200

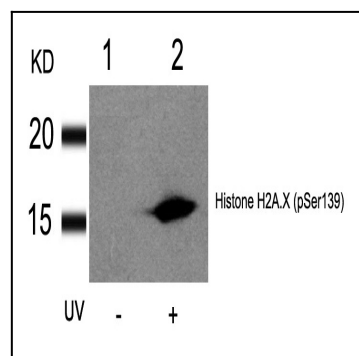


Figure 1: Western blot analysis of extracts from HT29 cells untreated(lane 1) or treated with UV(lane 2) using Histone H2A.X(Phospho-Ser139) Antibody 35-1247 .

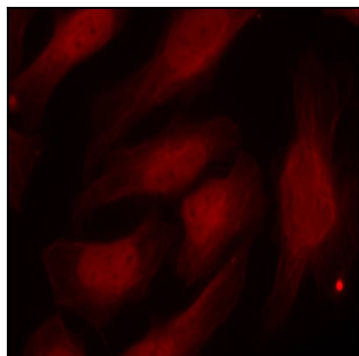


Figure 2: Immunofluorescence staining of methanol-fixed HeLa cells using Histone H2A.X(Phospho-Ser139) Antibody 35-1247 .

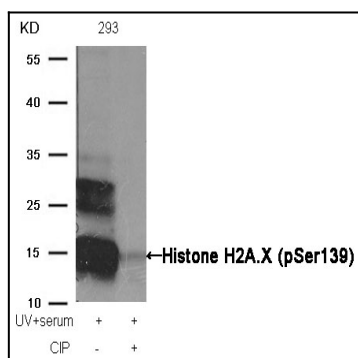


Figure 3: Western blot analysis of extracts from 293 cells, treated with UV+serum or calf intestinal phosphatase (CIP), using Histone H2A.X (Phospho-Ser139) Antibody 35-1247 .