

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

Clonality :	Polyclonal
Application :	WB,IF
Reactivity :	Human
Gene :	H2AFX
Gene ID :	3014
Uniprot ID :	P16104
Format :	Purified
Alternative Name :	H2A.X, H2AFX, H2a/x, HIST5-2AX
Isotype :	Rabbit IgG
Immunogen Information :	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

Amount :	50 μ l / 100 μ l
Content :	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage condition :	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

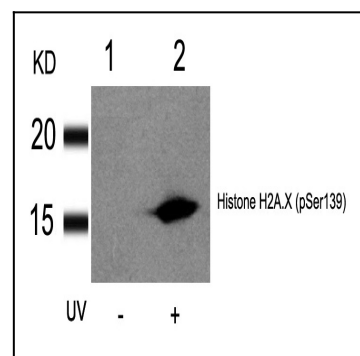


Figure 1: Western blot analysis of extracts from HT29 cells untreated(lane 1) or treated with UV(lane 2) using Histone H2A.X(Phospho-Ser139) Antibody 35-1247 .

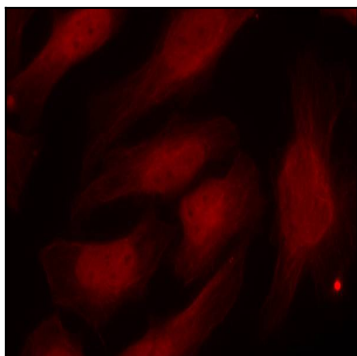


Figure 2: Immunofluorescence staining of methanol-fixed HeLa cells using Histone H2A.X(Phospho-Ser139) Antibody 35-1247 .

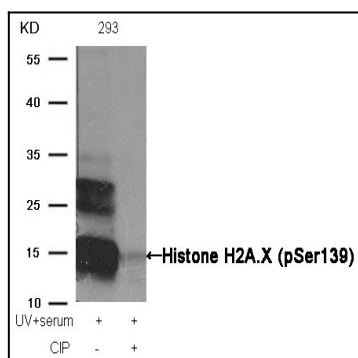


Figure 3: Western blot analysis of extracts from 293 cells, treated with UV+serum or calf intestinal phosphatase (CIP), using Histone H2A.X (Phospho-Ser139) Antibody 35-1247 .