

### 35-1593: Polyclonal Antibody to Histone H2A.X (Ab-139)

|                                |  |
|--------------------------------|--|
| <b>Clonality :</b>             | Polyclonal   |
| <b>Application :</b>           | WB,IHC,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 aa.137~141 (Q-A-S-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

#### 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, Immunohistochemistry: 1:50~1:100, Immunofluorescence: 1:100~1:200

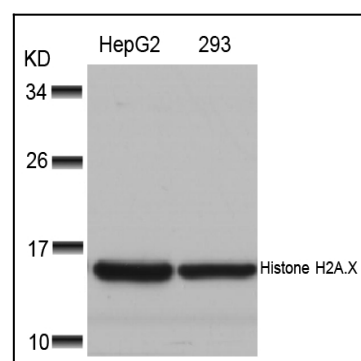


Figure 1: Western blot analysis of extracts from HepG2 and 293 cells using Histone H2A.X(Ab-139) Antibody 35-1593 .

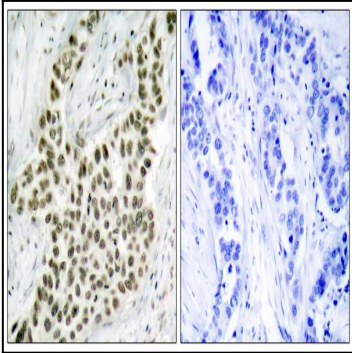


Figure 2: Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using Histone H2A.X(Ab-139) Antibody 35-1593 (left) or the same antibody preincubated with blocking peptide(right).

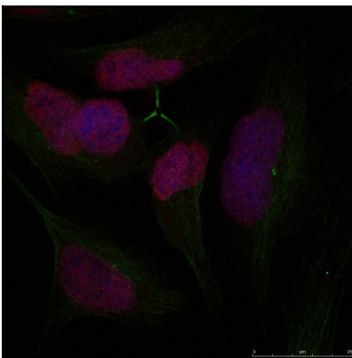


Figure 3: Immunofluorescence staining of methanol-fixed HeLa cells using Histone H2A.X(Ab-139) Antibody 35-1593 .