

## 12-4115: Phospho-Histone H2A.X (Ser139) (Clone: 1E4) rabbit mAb

|                                |  |
|--------------------------------|--|
| <b>Clonality :</b>             | Monoclonal   |
| <b>Clone Name :</b>            | HisH2AXS139-1E4  |
| <b>Application :</b>           | FACS,WB  |
| <b>Reactivity :</b>            | Human, Mouse   |
| <b>Conjugate :</b>             | Unconjugated   |
| <b>Format :</b>                | Purified   |
| <b>Alternative Name :</b>      | H2AFX, H2AX, $\gamma$ H2AX, gamma-H2AX   |
| <b>Isotype :</b>               | Rabbit IgG1k   |
| <b>Immunogen Information :</b> | A synthetic phospho-peptide corresponding to residues surrounding Ser139 of human phospho histone H2A.X. |

### Description

Histone H2AX is a variant of the nucleosome core histone H2A and is phosphorylated at Ser139 in response to DNA damage. Histone H2AX phosphorylation is considered a specific reporter of double-strand DNA breaks. The protein is also referred to as  $\gamma$ H2AX when phosphorylated at Ser139. H2AX phosphorylation is especially strong in response to double-strand breaks formed during apoptosis. However, physiological phosphorylation of Histone H2AX occurs when double-strand DNA breaks are formed during meiosis and V(D)J recombination. A549 and DU145 cell lines have been found to have higher expression levels of phosphorylated Histone H2AX compared to Jurkat, MCF-7, or HL-60 cell lines.

### Product Info

|                            |   |
|----------------------------|---|
| <b>Amount :</b>            | 20 $\mu$ l / 200 $\mu$ l                                |
| <b>Content :</b>           | 1X PBS, 0.02% NaN <sub>3</sub> , 50% Glycerol, 0.1% BSA |
| <b>Storage condition :</b> | Store at -20°C. Avoid repeated freeze and thaw cycles.  |

### Application Note

1  $\mu$ g/mL - 0.001  $\mu$ g/mL. It is recommended that the reagent be titrated for optimal performance for each application. See product image legends for additional information.(0.5mg/ml, more than 200 western blots)

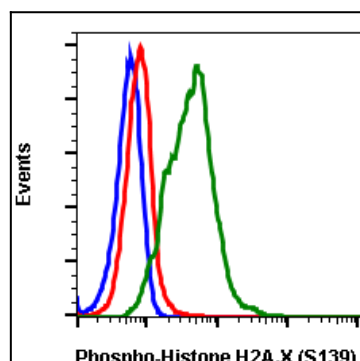


Fig-1: Flow cytometric analysis of 293T cells secondary antibody only negative control (blue) or untreated (red) or treated with UV and PMA (green) using Phospho-Histone H2A.X (Ser139) antibody HisH2AXS139-1E4 at 0.05  $\mu$ g/mL.

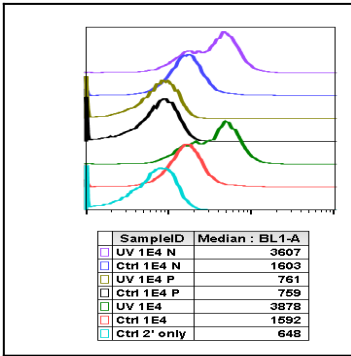


Fig 2 : Peptide blocking flow cytometric analysis of 293T cells secondary antibody only negative control (blue) or untreated (red) or treated with UV and PMA (green) or untreated and blocked with phospho-peptide (black) or treated and blocked with phospho peptide (gold) or untreated and blocked with non-phospho peptide (dark blue) or treated and blocked with non-phospho peptide (purple) using Phospho-Histone H2A.X (Ser139) antibody HisH2AXS139-1E4 at 0.1 µg/mL.

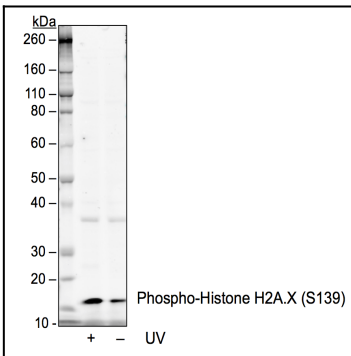


Fig-3: Western blot analysis of HEK293T cell extract untreated or treated with UV using 0.05 µg/mL Phospho-Histone H2A.X (Ser139) antibody HisH2AXS139-1E4.

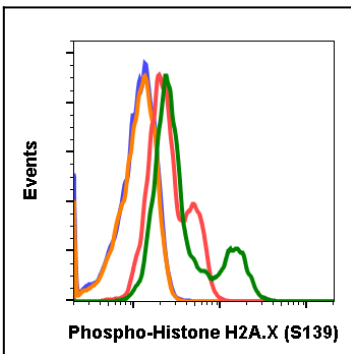


Fig-4: Flow cytometric analysis of 3T3 cells secondary antibody only (blue) or untreated with 0.1 µg/mL of isotype control (orange) or untreated (red) or UV and PMA-treated (green) using phospho-Histone H2A.X (Ser139) antibody HisH2AXS139-1E4.

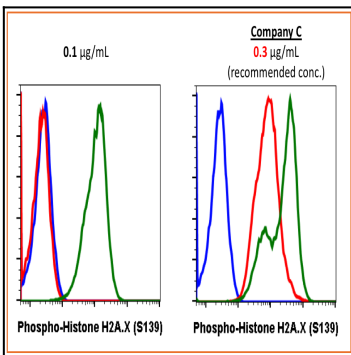


Fig-5: Flow cytometric analysis of 293T cells secondary antibody only negative control (blue) or untreated (red) or treated with UV + TPA (green) using Phospho-Histone H2A.X (Ser139) antibody HisH2AXS139-1E4 at 0.1µg/mL or Company C antibody at 0.3µg/mL (manufacturer's recommended concentration).