

Histone H2A.XS139ph antibody (rAb)

Catalog No: 91313

Clone: RM224

Isotype: IgG

Application(s): ICC, WB

Reactivity: Human, Wide Range Predicted

Quantity: 100 µg

Purification: Protein A Chromatography

Host: Rabbit

Concentration: 1 µg/µl

Background: Histone H2AX phospho Ser139 (H2AX, H2A histone family member X) replaces conventional H2A in a subset of nucleosomes. Nucleosomes wrap and compact DNA into chromatin, limiting DNA accessibility to the cellular machineries that require DNA as a template. Histones thereby play a central role in transcriptional regulation, DNA repair, DNA replication and chromosomal stability. DNA accessibility is regulated via a complex set of post-translational modifications of histones, also called the histone code, and nucleosome remodeling. Histone H2AX is 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.

RM224 reacts to Histone H2A.X only when phosphorylated at serine 139. No cross reactivity with other phosphorylated histones.

Immunogen: A phospho-peptide corresponding to Phospho-Histone H2AX (Ser139).

Buffer: PBS with 50% glycerol, 1% BSA, and 0.09% sodium azide. Sodium azide is highly toxic.

Application Notes:

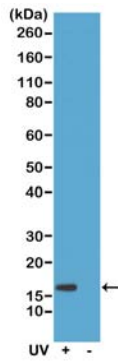
Applications Validated by Active Motif:

WB: 0.5 - 2 µg/ml

ICC: 0.5 - 2 µg/ml

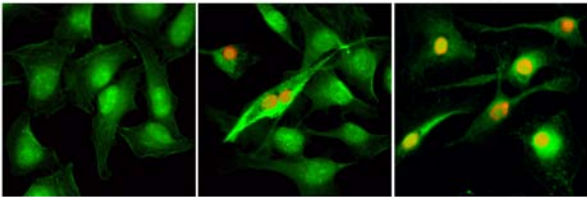
Storage and Guarantee: Some products may be shipped at room temperature. This will not affect their stability or performance. Avoid repeated freeze/thaw cycles by aliquoting items into single-use fractions for storage at -20°C for up to 2 years. Keep all reagents on ice when not in storage. This product is guaranteed for 12 months from date of receipt.

This product is for research use only and is not for use in diagnostic procedures.



Western blot of Histone H2A.XS139ph antibody (rAb). Acid extracts from HeLa cells treated or non-treated with UV were probed using Histone H2A.XS139ph antibody (Clone RM224) at 0.5 $\mu\text{g/ml}$.

UV treatment



Immunofluorescence stain of Histone H2A.XS139ph antibody (rAb). HeLa cells were stained using Histone H2A.XS139ph antibody (Clone RM224) at 2 $\mu\text{g/ml}$ (red). Actin filaments have been labeled with fluorescein phalloidin (green).