

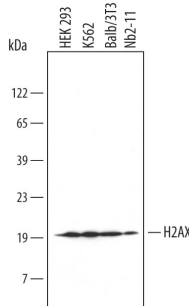
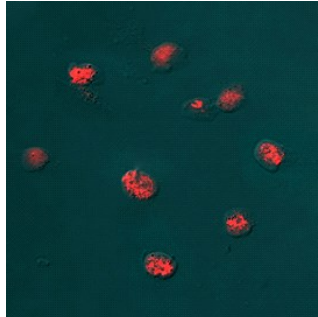
DESCRIPTION	
Species Reactivity	Human/Mouse/Rat
Specificity	Detects human, mouse and rat Histone H2AX in Western blots.
Source	Monoclonal Mouse IgG _{2A} Clone # 322105
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human Histone H2AX Gly3-Ser131 Accession # P16104
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	0.5 µg/mL	See Below
Immunocytochemistry	8-25 µg/mL	See Below

DATA

<p>Western Blot</p>  <p>Detection of Human/Mouse/Rat Histone H2AX by Western Blot. Western blot shows lysates of HEK293 human embryonic kidney cell line, K562 human chronic myelogenous leukemia cell line, Balb/3T3 mouse embryonic fibroblast cell line, and Nb2-11 rat lymphoma cell line. PVDF membrane was probed with 0.5 µg/mL of Mouse Anti-Human/Mouse/Rat Histone H2AX Monoclonal Antibody (Catalog # MAB3406) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for Histone H2AX at approximately 20 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p>Immunocytochemistry</p>  <p>Histone H2AX in HeLa Human Cell Line. Histone H2AX was detected in immersion fixed HeLa human cervical epithelial carcinoma cell line using Mouse Anti-Human/Mouse/Rat Histone H2AX Monoclonal Antibody (Catalog # MAB3406) at 8 µg/mL for 3 hours at room temperature. Cells were stained using the Northern-Lights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to nuclei. View our protocol for Fluorescent ICC Staining of Cells on Coverslips.</p>
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PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Histone H2AX is a core histone protein that is phosphorylated at S139 in cells exposed to DNA double-strand break-inducing agents, such as ionizing radiation. The S139 phosphorylated H2AX, termed γ-H2AX, marks the site of DNA double-strand breaks and serves to recruit cell cycle checkpoint and DNA repair factors to the site of damage.