Human Phospho-Histone H2AX (S139) Antibody
Antigen Affinity-purified Polyclonal Rabbit IgG
Catalog Number: AF2288

DESCRIPTION
Species Reactivity Human
Specificity Detects human Histone H2AX when phosphorylated at S139.
Source Polyclonal Rabbit IgG
Purification Antigen and protein A Affinity-purified
Immunogen Phosphopeptide containing human Histone H2AX S139 site
Formulation Lyophilized from a 0.2 mg/mL solution in sterile PBS. See Below

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 Sample
Concentration
Western Blot 0.5 μg/mL See Below
Immunocytochemistry 5-15 μg/mL See Below
Immunohistochemistry 5-15 μg/mL See Below
Simple Western 5 μg/mL See Below

DATA

Western Blot
Detection of Human Phospho-Histone H2AX (S139) by Western Blot. Western blot shows lysates of Jurkat human acute T cell leukemia cell line untreated (-) or treated (+) with 1 μM camptothecin (CPT) for 24 hours, loaded at 0.2 mg/mL. A specific band was detected for Phospho-Histone H2AX (S139) at approximately 20 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Immunohistochemistry
Histone H2AX in Human Breast Cancer Tissue. Histone H2AX was detected in immunoperoxidase-embedded sections of human breast cancer tissue using Rabbit Anti-Human Phospho-Histone H2AX (S139) Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2288) at 10 μg/mL overnight at 4°C. Before incubation with the primary antibody tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using the Rabbit HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS005) and counterstained with hematoxylin (blue). View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.

PREPARATION AND STORAGE
Reconstitution Reconstitute at 0.2 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.
- 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.
Histone H2AX 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.