PRODUCT INFORMATION



Anti-yH2AX (phospho-Ser139) Rabbit Monoclonal Antibody (Clone RM224)

Item No. 20721

Overview and Properties

Contents: This vial contains 100 µg of protein A affinity-purified antibody from an animal

origin-free culture supernatant.

Immunogen: A phospho-peptide corresponding to yH2AX (phospho-Ser139) Cross Reactivity: (+) Phospho-yH2AXSer139; (-) Other phosphorylated histones

Species Reactivity: (+) All species

Form: Liquid

Storage: -20°C (as supplied)

Stability: ≥1 year

Storage Buffer: 50% glycerol/PBS with 1% BSA and 0.09% sodium azide

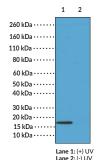
Clone: RM224 Host: Rabbit Isotype: **IgG**

Applications: ELISA, Immunocytochemistry (ICC), Multiplex, and Western blot (WB); the

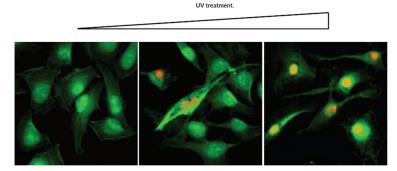
> recommended starting dilution for ELISA is 0.2 - 1 μ g/ml, 0.5 - 2 μ g/ml for ICC and WB, and $0.1 - 1 \mu g/ml$ for multiplex. Other applications were not tested, therefore

optimal working concentration/dilution should be determined empirically.

Images



Western blot of acid extracts of HeLa cells treated or non-treated with UV. Using Anti-yH2AX (phospho-Ser139) Rabbit Monoclonal Antibody (Clone RM224) at 0.5 μg/ml, showed a band of histone H2A.X phosphorylated at Ser139 in HeLa cells.



Immunocytochemistry of HeLa cells using Anti-yH2AX (phospho-Ser139) Rabbit Monoclonal Antibody (Clone RM224) (red). Actin filaments have been labeled with fluorescein phalloidin (green).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website

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PRODUCT INFORMATION



Description

Histone H2AX, a variant of the nucleosome core histone H2A, undergoes phosphorylation on serine 139 in response to DNA damage, particularly when the damage involves formation of double-strand breaks. Phosphorylated H2AX is also termed γ H2AX. Induction of γ H2AX in cells exposed to genotoxic agents is considered a sensitive and specific reporter of DNA damage. This antibody reacts to γ H2AX when phosphorylated at Ser139 and does not detect other phosphorylated histones.

Reference

1. Huang, X., Tanaka, T., Kurose, A., et al. Constitutive histone H2AX phosphorylation on Ser-139 in cells untreated by genotoxic agents is cell-cycle phase specific and attenuated by scavenging reactive oxygen species. *Int. J. Oncol.* 29(2), 495-501 (2006).

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