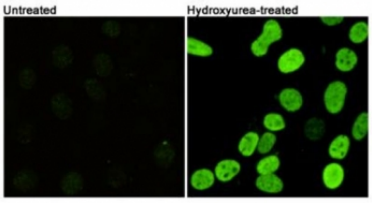
Phospho-Histone H2AX Antibody (pS139) (F55063)

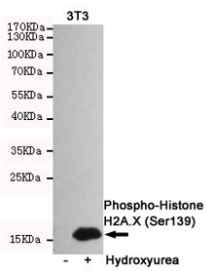
Catalog No.	Formulation	Size
F55063-0.1ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.1 ml

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Mouse
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Purity	Antigen affinity purified
UniProt	P16104
Applications	Western Blot : 1:1000-1:2000 Immunofluorescence : 1:200-1:400
Limitations	This Phospho-Histone H2AX antibody is available for research use only.



Immunofluorescent staining of mouse NIH 3T3 cells untreated (left) and treated (right) with Hydroxyurea, using Phospho-Histone H2AX antibody.



Western blot testing of cell lysate from mouse NIH 3T3 cells untreated (left) or treated (right) with Hydroxyurea, using Phospho-Histone H2AX antibody.

Description

Variant histone H2A which replaces conventional H2A in a subset of nucleosomes. Nucleosomes wrap and compact DNA into chromatin, limiting DNA accessibility to the cellular machineries which require DNA as a template. Histones thereby play a central role in transcription regulation, DNA repair, DNA replication and chromosomal stability. DNA accessibility is regulated via a complex set of post- translational modifications of histones, also called histone code, and nucleosome remodeling. 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.

Application Notes

Titration of the Phospho-Histone H2AX antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

The amino acid sequence surrounding phosphorylated serine 139 was used as the immunogen for the Phospho-Histone H2AX antibody.

Storage

Aliquot the Phospho-Histone H2AX antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.