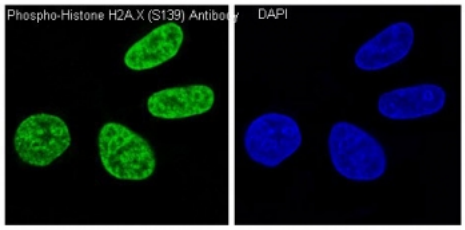
Phospho-Histone H2AX Antibody (pS139) [clone AbH41] (RQ4503)

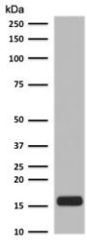
Catalog No.	Formulation	Size
RQ4503	Antibody in PBS with 0.02% sodium azide, 50% glycerol and 0.4-0.5mg/ml BSA	100 ul

Bulk quote request

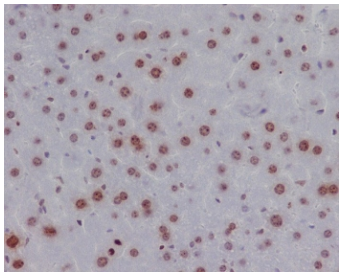
Availability	1-2 weeks
Species Reactivity	Human, Mouse
Format	Purified
Host	Rabbit
Clonality	Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	AbH41
Purity	Protein A affinity
UniProt	P16104
Localization	Nucleus
Applications	Western Blot : 1:500-1:1000ug/ml IHC (FFPE) : 1:50-1:200 IF/ICC : 1:50-1:200
Limitations	This phospho-Histone H2AX antibody is available for research use only.



Immunofluorescent staining of human HeLa cells treated and untreated with H2O2 using phospho-Histone H2AX antibody (green) and DAPI nuclear stain (blue).



Western blot testing of etoposide-treated human Jurkat lysate with phospho-Histone H2AX antibody.



IHC testing of FFPE mouse liver with phospho-Histone H2AX antibody. HIER: boil tissue sections in pH6, 10mM citrate buffer, for 10-20 min followed by cooling at RT for 20 min.

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. Included within the Histone H2A antibodies collection, this antibody enables analysis of histone modification patterns and chromatin regulatory mechanisms involving H2A and its variants.

Application Notes

Optimal dilution of the phospho-Histone H2AX antibody should be determined by the researcher.

Immunogen

The amino acids surrounding a phosphorylated serine at position 139 were used as the immunogen for the phospho-Histone H2AX antibody.

Storage

After reconstitution, the phospho-Histone H2AX antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.