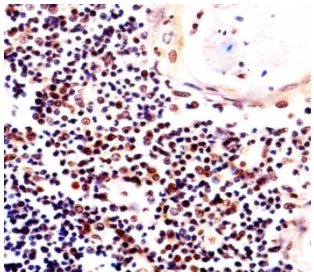
Histone H2AX Antibody / H2AFX [clone 938CT5.1.1] (F54477)

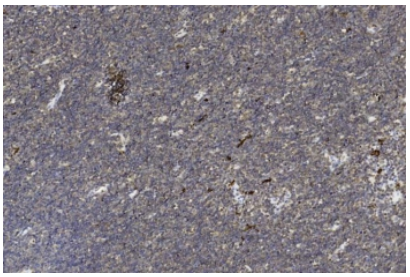
Catalog No.	Formulation	Size
F54477-0.2ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.2 ml
F54477-0.05ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.05 ml

Bulk quote request

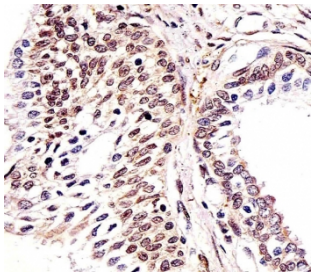
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	IgG1
Clone Name	938CT5.1.1
Purity	Protein G affinity
UniProt	P16104
Localization	Nuclear
Applications	Immunohistochemistry (FFPE) : 1:25 Western Blot : 1:500-1:2000
Limitations	This Histone H2AX antibody is available for research use only.



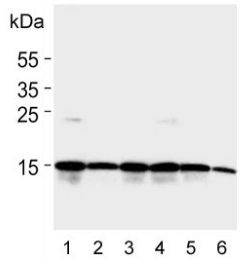
IHC testing of FFPE human thymus tissue with Histone H2AX antibody. HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to staining.



IHC testing of FFPE human thymus tissue with Histone H2AX antibody. HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to staining.



IHC testing of FFPE human prostate tissue with Histone H2AX antibody. HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to staining.



Western blot testing of human 1) HEK293, 2) CEM, 3) HepG2, 4) Jurkat, 5) HeLa and 6) Raji cell lysate with Histone H2AX antibody. Predicted molecular weight ~15 kDa.

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

The stated application concentrations are suggested starting points. Titration of the Histone H2AX antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 115-143 from the human protein was used as the immunogen for the Histone H2AX antibody.

Storage

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