Best Tools for immunology Research

Histone H2A.X(Phospho Ser139) mouse mAb

Catalog No :	YM1429
Reactivity :	Human;Mouse
Applications :	WB;IHC;IF
Target :	Histone H2A.X
Fields :	>>Necroptosis;>>Neutrophil extracellular trap formation;>>Alcoholism;>>Systemic lupus erythematosus
Gene Name :	H2AFX
Protein Name :	Histone H2A.x,γH2AX
Human Gene Id :	3014
Human Swiss Prot No :	P16104
Mouse Swiss Prot No :	P27661
Immunogen :	Synthetic phosphopeptide corresponding to residues surrounding Ser139 of human H2A.X.
Specificity :	This antibody detects endogenous levels of H2A.X only when phosphorylated at serine 139.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Monoclonal, Mouse
Dilution :	wb dilution 1:2000 IHC 1:200-400 icc dilution 1:400. IF 1:50-200
Purification :	The antibody was affinity-purified from mouse ascites by affinity-chromatography using epitope-specific immunogen.
Concentration :	1 mg/ml

Storage Stability : -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band : 15kD

Cell Pathway : Systemic lupus erythematosus;

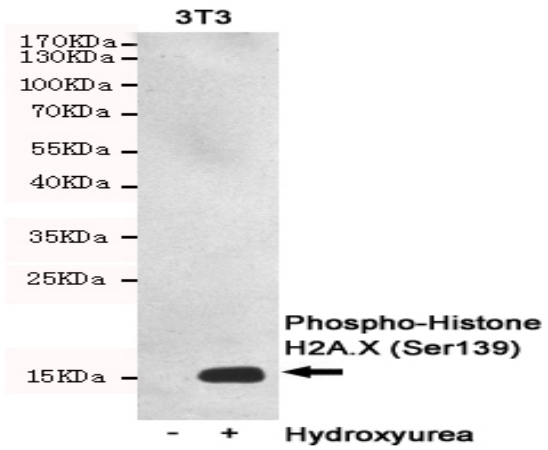
Background : Histones are basic nuclear proteins that are responsible for the nucleosome structure of the chromosomal fiber in eukaryotes. Two molecules of each of the four core histones (H2A, H2B, H3, and H4) form an octamer, around which approximately 146 bp of DNA is wrapped in repeating units, called nucleosomes. The linker histone, H1, interacts with linker DNA between nucleosomes and functions in the compaction of chromatin into higher order structures. This gene encodes a replication-independent histone that is a member of the histone H2A family, and generates two transcripts through the use of the conserved stem-loop termination motif, and the polyA addition motif. [provided by RefSeq, Oct 2015],

Function : developmental stage:Synthesized in G1 as well as in S-phase.,domain:The [ST]-Q motif constitutes a recognition sequence for kinases from the PI3/PI4-kinase family.,function: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.,PTM:Mon

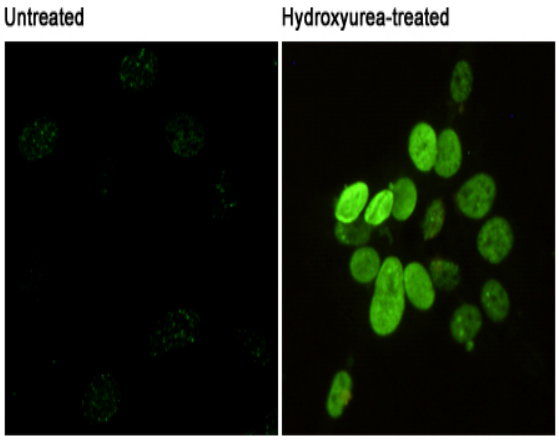
Subcellular Location : Nucleus . Chromosome .

Expression : Lung,Placenta,

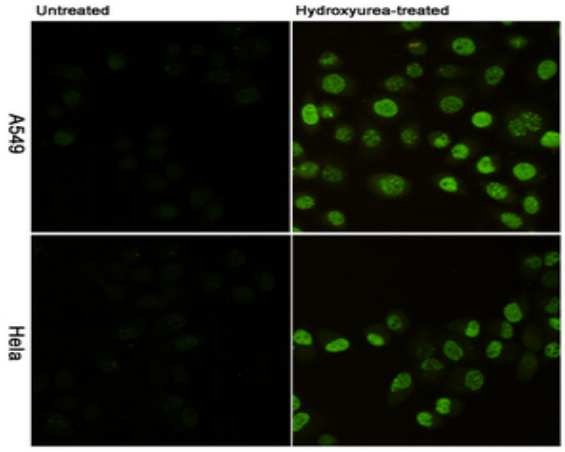
Products Images



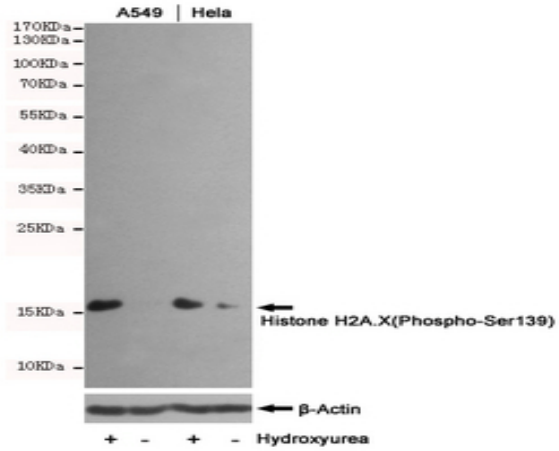
Western blot detection of Phosphorylation of H2A.X at Serine 139 in 3T3 or Hydroxyurea-treated 3T3 cell lysates using Phospho-Histone H2A.X (Ser139) mouse mAb (1:2000 diluted).Predicted band size:15KDa.Observed band size:15KDa.



Immunofluorescent analysis of Phosphorylation of H2A.X at Serine 139 in 3T3 or Hydroxyurea-treated 3T3 cells using Phospho-Histone H2A.X



Immunofluorescent analysis of Phosphorylation of H2A.X at Serine 139 in A549(upper,untreated or Hydroxyurea-treated) and Hela(lower,untreated or Hydroxyurea-treated) using Phospho-Histone H2A.X (Ser139) mouse mAb (1:400).



Western blot analysis of extracts from untreated or Hydroxyurea-treated Hela and A549 cells, using Histone H2A.X(Phospho-Ser139) mouse mAb (1:1000 diluted) (upper) or β-Actin Mouse mAb (200068-8F10) (lower).Predicted band size:15KDa.Observed band size:15KDa.