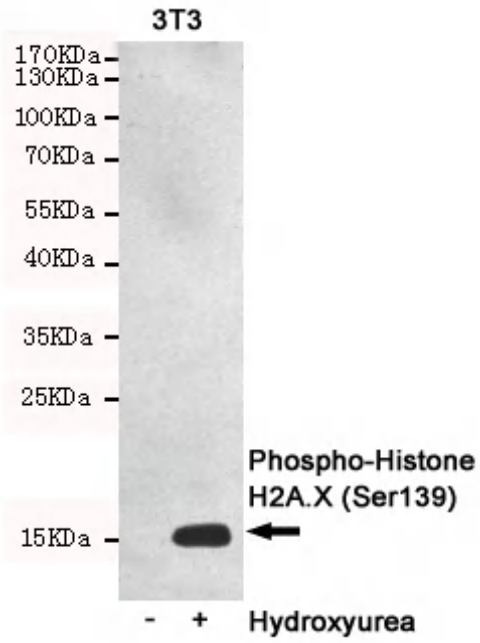
Histone H2A.X(Phospho-Ser139) mouse mAb

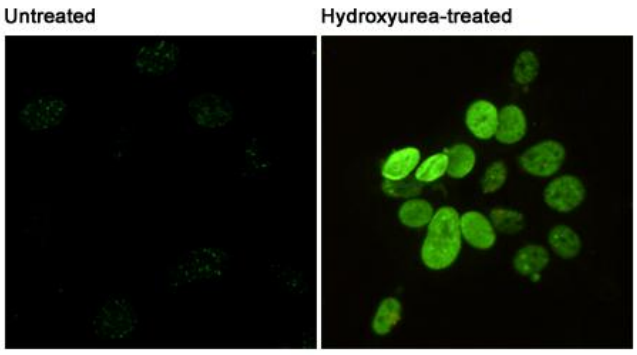
Catalog No	YP-Ab-01107
Isotype	IgG
Reactivity	Human;Mouse
Applications	WB;IHC;IF
Gene Name	H2AFX
Protein Name	Histone H2A.x,γH2AX
Immunogen	Synthetic phosphopeptide corresponding to residues surrounding Ser139 of human H2A.X.
Specificity	This antibody detects endogenous levels of H2A.X only when phosphorylated at serine 139.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse
Purification	The antibody was affinity-purified from mouse ascites by affinity-chromatography using epitope-specific immunogen.
Dilution	wb dilution 1:2000 IHC-P 1:100-500 icc dilution 1:400. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	H2A histone family, member X;H2A.X;H2a/x;H2AFX;H2AX;H2AX histone;H2AX_HUMAN;Histone H2A.X;Histone H2AX
Observed Band	15kD
Cell Pathway	Nucleus . Chromosome .
Tissue Specificity	Lung,Placenta,
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

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],
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

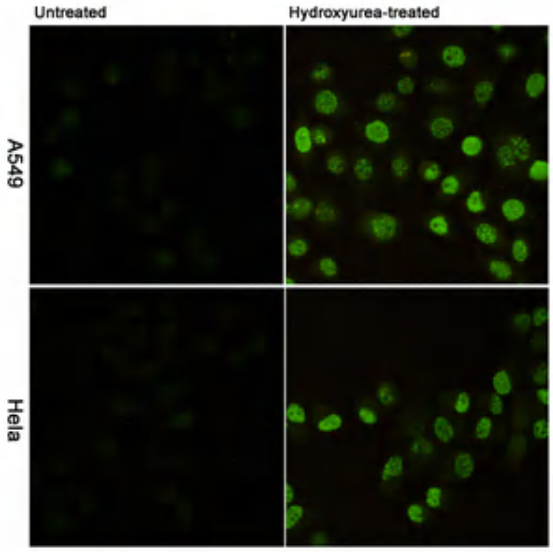
Products Images



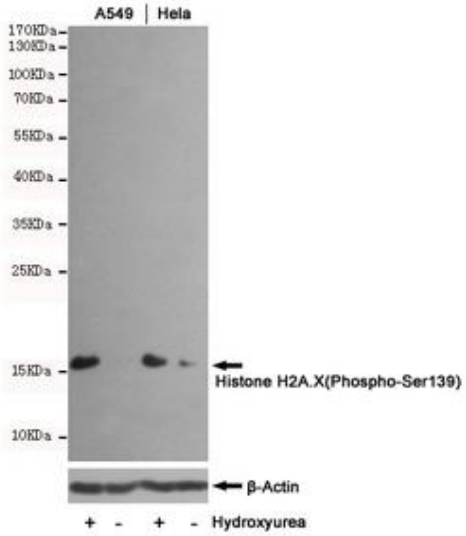
Western blot detection of Phosphorylation of H2A.X at Serine 139 in 3T3 or Hydroxyurea-treated 3T3 cell lysates using Phospho-Histone H2A.X (Ser139) mouse mAb (1:2000 diluted).Predicted band size:15KDa.Observed band size:15KDa.



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.