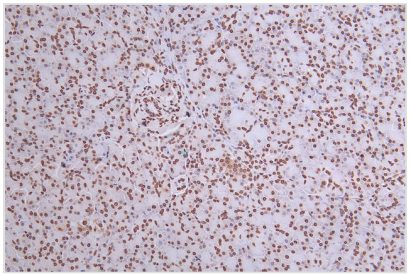
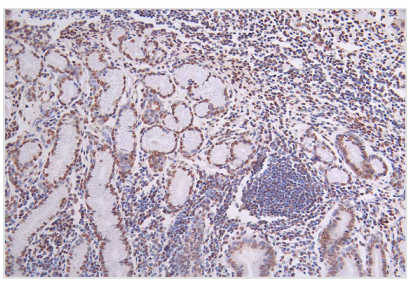
H2AFX Recombinant Monoclonal Antibody

Product Code	CSB-RA034362A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P16104
Immunogen	A synthesized peptide derived from Human H2AFX
Species Reactivity	Human
Tested Applications	ELISA, IHC, FC; Recommended dilution: IHC:1:50-1:200, FC:1:50-1:200
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Epigenetics and Nuclear Signaling
Gene Names	H2AFX
Clone No.	29H6

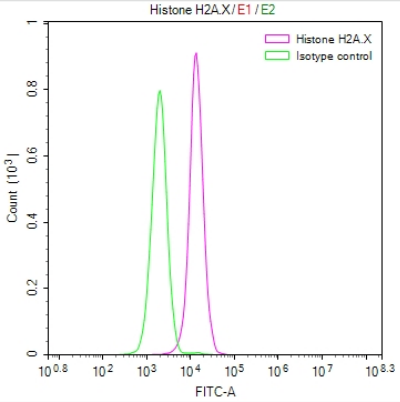
Image



IHC image of CSB-RA034362A0HU diluted at 1:50 and staining in paraffin-embedded human pancreati tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit polymer IgG labeled by HRP and visualized using 0.27% DAB.



IHC image of CSB-RA034362A0HU diluted at 1:50 and staining in paraffin-embedded human breast cancer performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit polymer IgG labeled by HRP and visualized using 0.27% DAB.



Overlay Peak curve showing HepG2 cells stained with CSB-RA034362A0HU (red line) at 1:50. The cells were fixed in 4% formaldehyde and permeated by 0.2% TritonX-100. Then 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody (1μg/1*10^{6}cells) for 45min at 4?. The secondary antibody used was FITC-conjugated Goat Anti-rabbit IgG(H+L) at 1:200 dilution for 35min at 4?.Control antibody (green line) was rabbit IgG (1μg/1*10^{6}cells) used under the same conditions. Acquisition of >10,000 events was performed.

Description

The synthesis of the H2AFX recombinant monoclonal antibody entails a meticulously planned process involving recombinant DNA and in vitro cloning. The H2AFX antibody genes are cloned into expression vectors. Subsequently, these vectors are introduced into host cells, creating a conducive environment for the recombinant antibody's expression within a cell culture milieu. After expression, the antibody is subjected to affinity chromatography purification. Through rigorous testing, this antibody can be used in ELISA, IHC, and FC applications to detect human histone H2AX.

Histone H2AX and its phosphorylated form, γ-H2AX, are critical components of the cellular response to DNA damage. They serve as markers of DNA damage, enabling the recruitment of repair proteins to damaged sites and contributing to the maintenance of genomic integrity and cell viability.