Product Datasheet

Histone H2A.X(Ab-139) Antibody

Catalog No: #21260

Package Size: #21260-1 50ul #21260-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

Description

Product Name	Histone H2A.X(Ab-139) Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were produced by immunizing rabbits with synthetic peptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific peptide.
Applications	WB IHC IF
Species Reactivity	Hu
Specificity	The antibody detects endogenous level of total Histone H2A.X protein.
Immunogen Type	Peptide-KLH
Immunogen Description	Peptide sequence around aa.137~141 (Q-A-S-Q-E) derived from Human Histone H2A.X.
Target Name	Histone H2A.X
Other Names	H2A.X; H2AFX; H2a/x; HIST5-2AX;
Accession No.	Swiss-Prot: P16104NCBI Protein: NP_002096.1
Uniprot	P16104
GeneID	3014;
Concentration	1.0mg/ml
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C for long term preservation (recommended). Store at 4°C for short term use.

Application Details

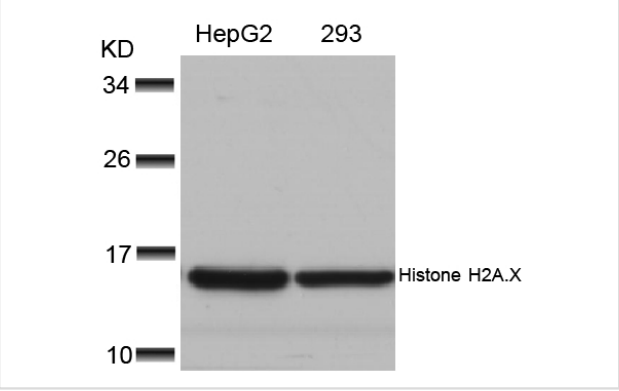
Predicted MW: 15kd

Western blotting: 1:500~1:1000

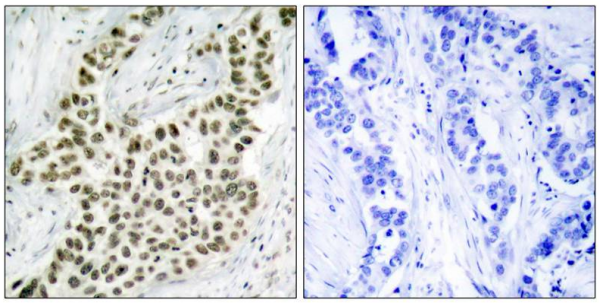
Immunohistochemistry: 1:50~1:100

Immunofluorescence: 1:100~1:200

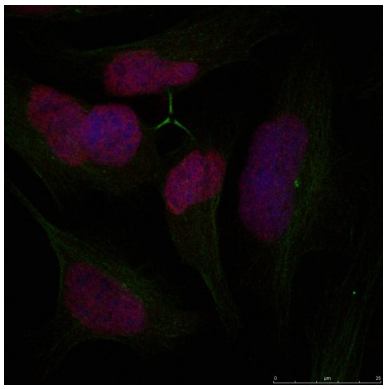
Images



Western blot analysis of extracts from HepG2 and 293 cells using Histone H2A.X(Ab-139) Antibody #21260.



Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using Histone H2A.X(Ab-139) Antibody #21260(left) or the same antibody preincubated with blocking peptide(right).



Immunofluorescence staining of methanol-fixed Hela cells using Histone H2A.X(Ab-139) Antibody #21260.

Background

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

Yaneva M, et al. (2005) Nucleic Acids Res. 33(16): 5320-5330.
Tsukuda T, et al.(2006) Nature. Author manuscript; available in PMC 2006 March 6

Note: This product is for in vitro research use only