

Histone H2AX Antibody

Catalog No: #33686

Package Size: #33686-1 50ul #33686-2 100ul

Description

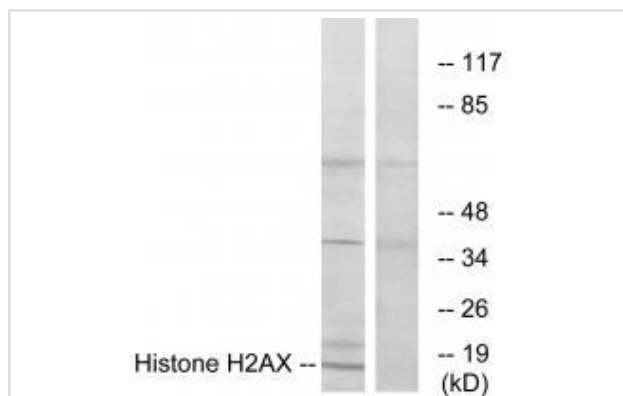
Product Name	Histone H2AX Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Applications	WB IF
Species Reactivity	Hu
Specificity	The antibody detects endogenous levels of total Histone H2AX protein.
Immunogen Type	Peptide
Immunogen Description	Synthesized peptide derived from internal of human Histone H2AX.
Conjugates	Unconjugated
Target Name	Histone H2AX
Other Names	H2A.X; H2AFX; H2a/x; HIST5-2AX; Histone H2A.X
Accession No.	Swiss-Prot: P16104NCBI Gene ID: 3014
SDS-PAGE MW	15kd
Concentration	1.0mg/ml
Formulation	Rabbit IgG in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C

Application Details

Western blotting: 1:500~1:3000

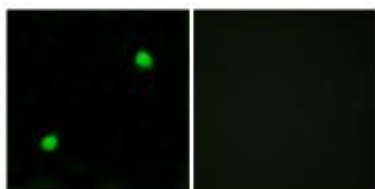
Immunofluorescence: 1:100~1:500

Images



Western blot analysis of extracts from HT-29 cells, using Histone H2AX antibody #33686.

Immunofluorescence analysis of COS7 cells, using Histone H2AX antibody #33686.



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.

The MGC Project Team; Genome Res. 14:2121-2127(2004).

Rogakou E.P., J. Biol. Chem. 273:5858-5868(1998).

Rogakou E.P., J. Biol. Chem. 275:9390-9395(2000).

Published Papers

el at., ATR activated by EB virus facilitates chemotherapy resistance to cisplatin or 5-fluorouracil in human nasopharyngeal carcinoma. In Cancer Manag Res on 2019 Jan 9 by Zhang B, Cui B, et al..PMID:30666155, , (2019)

[PMID:30666155](#)

el at., Downregulation and translocation of nuclear ING4 is correlated with tumorigenesis and progression of head and neck squamous cell carcinoma. In Oral Oncol on 2011 Mar by Li XH, Kikuchi K, et al..PMID:21310648, , (2011)

[PMID:21310648](#)

Note: This product is for in vitro research use only and is not intended for use in humans or animals.