For Research Use Only

Histone H2A.X Monoclonal antibody

Catalog Number:68888-1-lg 2 Publications



Basic Information

Catalog Number:

68888-1-Ig

BC013416

Concentration:

1000 ug/ml

Source:

WINIPROT ID:

Mouse

P16104

Isotype:

GenBank Accession Number:

BC013416

GeneID (NCBI):

3014

UNIPROT ID:

P16104

Full Name:

H2A histone family, member X
Calculated MW:
15 kDa
Observed MW:
17 kDa

Purification Method: Protein A purification

CloneNo.:

3E11B2 Recommended Dilutions: WB 1:5000-1:50000 IHC 1:500-1:2000

IF/ICC 1:500-1:2000

Applications

Tested Applications:

WB, IHC, IF/ICC, FC (Intra), ELISA

Cited Applications:

WB, IF

lgG1

Species Specificity: human, mouse, rat Cited Species:

human, rat

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0 Positive Controls

WB: Saos-2 cells, MDA-MB-231 cells, HeLa cells, LNCaP cells, HEK-293 cells, Jurkat cells, HSC-T6 cells,

NIH/3T3 cells, 4T1 cells

IHC: human stomach cancer, human stomach cancer

tissue

IF/ICC: HepG2 cells,

Background Information

Histone H2A.X belongs to the histone H2A family, which is synthesized in G1 and S phases. It is involved in nucleosomal organization of chromatin together with other histone proteins and is especially important for recombination between immunoglobulin switch regions. H2A.X becomes phosphorylated on serine 139 (to form gamma-H2AFX or H2AX139ph) in response to DNA double strand breaks (DSBs) generated by exogenous genotoxic agents and by stalled replication forks, which promotes DNA repair and maintains genomic stability. The calculated molecular weight of H2AX is 15 kDa, but the ubiquitinated H2A.X is about 22 kDa.

Notable Publications

Author	Pubmed ID	Journal	Application
Xiaoyun Xie	39715938	Histochem Cell Biol	IF
Bichuan Wang	39106476	J Med Chem	WB

Storage

Storage:

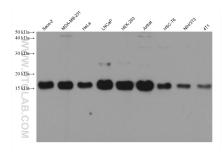
Store at -20°C. Stable for one year after shipment.

torage Buffer

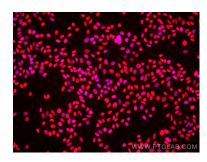
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

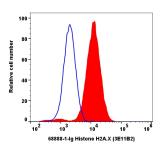
Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 68888-1-lg (Histone H2A.X antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using Histone H2A.X antibody (68888-1-lg, Clone: 3E11B2) at dilution of 1:1000 and Multi-rAb CoraLite® Plus 594-Goat Anti-Mouse Recombinant Secondary Antibody (H+L) (Cat.NO. RGAM004).



1x10^6 HepG2 cells were intracellularly stained with 0.1 ug Histone H2A.X Monoclonal antibody (68888-1-lg, Clone:3E11B2) and Multi-rAb CoraLite ® Plus 647-Goat Anti-Mouse Recombinant Secondary Antibody (H+L) (RGAM005)(red), or 0.1 ug Mouse IgG1 isotype control Mouse McAb (66360-1-lg, Clone: 1F8D3) (blue). Cells were fixed with 4% PFA and permeabilized with 0.1% TritonX-100.



Immunohistochemical analysis of paraffinembedded human stomach cancer slide using 68888-1-Ig (Histone H2A.X antibody) at dilution of 1:1000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).