

For Research Use Only

Phospho-Histone H2A.X (Ser139) Polyclonal antibody

Catalog Number: 29380-1-AP

8 Publications



Basic Information

Catalog Number:

29380-1-AP

Size:

100ul, Concentration: 400 ug/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

GenBank Accession Number:

BC013416

GeneID (NCBI):

3014

UNIPROT ID:

P16104

Full Name:

H2A histone family, member X

Calculated MW:

15 kDa

Observed MW:

15 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:500-1:3000

IF/ICC 1:200-1:800

Applications

Tested Applications:

WB, IF/ICC, ELISA

Cited Applications:

WB, IF

Species Specificity:

human

Cited Species:

human, mouse

Positive Controls:

WB : UV treated HEK-293 cells,

IF/ICC : U2OS cells,

Background Information

The histone variant H2AX is a major component of the DNA damage response (DDR), especially functioning in amplifying DNA damage signals. In response to DNA double-strand breaks (DSBs), H2AX is instantaneously phosphorylated at Ser139 (a form called γ H2AX) by the kinases ATM and ATR. The phosphorylation of H2AX at Ser139, resulting in the formation of γ H2AX puncta in the nuclei, is an early event in the cellular response to DNA damage. Therefore, phospho-Histone H2A.X (Ser139) is also known as γ H2AX. The phosphorylation site of H2AX, Ser139, has also been described as Ser140 in other literature, and they recognize the same amino acid site. (PMID: 22908299, PMID: 30106130, PMID: 22941631)

Notable Publications

Author	Pubmed ID	Journal	Application
Bo Lv	39423796	Mol Cell	WB
Amandeep Thakur	38776806	Eur J Med Chem	WB
Xi Sheng	38583247	Bioorg Chem	WB

Storage

Storage:

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

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

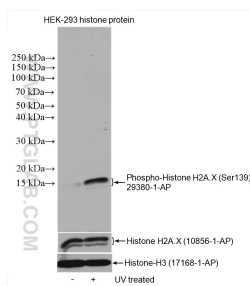
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

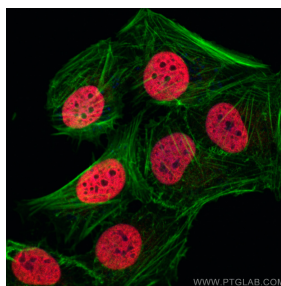
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

Selected Validation Data



Non-treated and UV treated HEK-293 cells were subjected to SDS PAGE followed by western blot with 29380-1-AP (Phospho-Histone H2A.X (Ser139) antibody) at dilution of 1:1500 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with Histone H2A.X antibody and Histone H3 antibody as loading control.



Immunofluorescent analysis of (4% PFA) fixed U2OS cells using Phospho-Histone H2A.X (Ser139) antibody (29380-1-AP) at dilution of 1:400 and CoraLite® 594-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-4), CL488-Phalloidin (green).