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 Concentration: 400 ug/ml Source: Rabbit Isotype:

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 cH2AX) by the kinases ATM and ATR. The phosphorylation of H2AX at Ser 139, resulting in the formation of gamma-H2AX puncta in the nuclei, is an early event in the cellular response to the contract of the coDNA 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

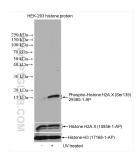
Storage

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

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).