

For Research Use Only

# Phospho-Histone H2A.X (Ser139) Polyclonal antibody



Catalog Number: 29380-1-AP **6 Publications**

## Basic Information

<b>Catalog Number:</b> 29380-1-AP	<b>GenBank Accession Number:</b> BC013416	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 400 µg/ml	<b>GeneID (NCBI):</b> 3014	<b>Recommended Dilutions:</b> WB 1:500-1:3000
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P16104	
<b>Isotype:</b> IgG	<b>Full Name:</b> H2A histone family, member X	
	<b>Calculated MW:</b> 15 kDa	
	<b>Observed MW:</b> 15 kDa	

## Applications

<b>Tested Applications:</b> WB, ELISA	<b>Positive Controls:</b> WB : UV treated HEK-293 cells,
<b>Cited Applications:</b> WB, IF	
<b>Species Specificity:</b> Human	
<b>Cited Species:</b> human, mouse	

## 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  $\gamma$ H2AX) by the kinases ATM and ATR. The phosphorylation of H2AX at Ser139, resulting in the formation of  $\gamma$ 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  $\gamma$  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
Xi Sheng	38583247	Bioorg Chem	WB
Chuanxin Zhang	38364760	Ecotoxicol Environ Saf	IF
Jie Liu	38195456	J Nanobiotechnology	WB

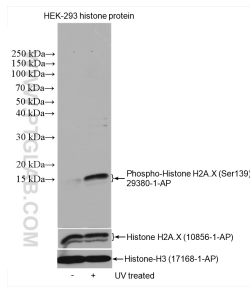
## Storage

**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:  
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

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## 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.