## #P37751 Phospho-Histone H2A. X (S139) For Plant Order Order O21-34695924 orders@ab-mart.com Support 400-6123-828 support1@ab-mart.com Web www.abmart.cn

## **Description:**

The chromatin-specific state relies on a nucleosome structure that varies depending on histone variants, e.g. H2A.X, H2A.Z, H3.3 and CenH3, and on covalent modifications, e.g. acetylation, methylation, phosphorylation and ubiquitination on various histone amino acid residues. Nucleosome assembly, disassembly and reassembly are fundamental to diverse processes such as DNA replication, transcription and repair. Because of their location at the periphery of the nucleosome, histones H2A/H2B are more dynamic and need to be removed prior to H3/H4 eviction during nucleosome disassembly. Conversely, nucleosome assembly/reassembly is initiated by H3/H4 deposition, which is then followed by H2A/H2B deposition.

**Uniprot:** 004848; Q9S9K7; At1g08880; At1g54690

## **Alternative Names:**

H2AX; H2AXA; H2AXA; H2AXB; histone H2AXb; histone H2AXA; HTA3; HTA5;

**Specificity:** Phospho-Histone H2A.X (S139) Antibody detects endogenous levels of total Phospho-Histone H2A.X (S139) .

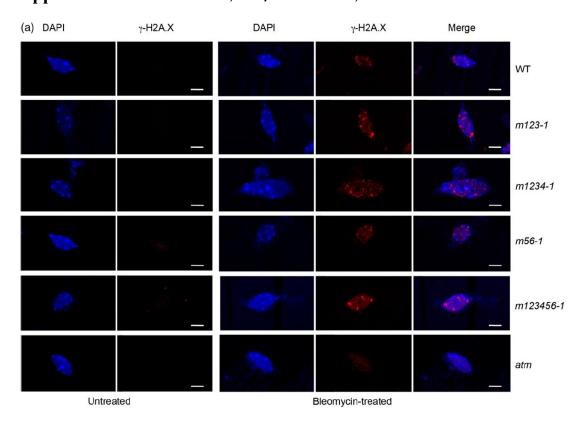
**Reactivity:** Arabidopsis thaliana, Oryza sativa, Glycine max, Solanum lycopersicum, Solanum tuberosum, Zea mays, Triticum aestivum, Malus pumila Mill, Amygdalus persicaL, Pyrus spp, ect.

Source: Rabbit

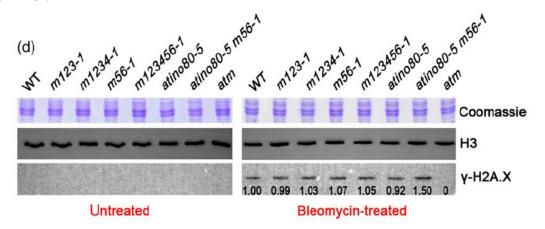
**Mol.Wt.:** 15kD:

**Storage Condition:** Store at -20 °C. Stable for 12 months from date of receipt.

## **Application: wb** 1:1000-1:2000; **IF/IHC** 1:50-1:200;



(a) Phosphorylated H2A.X (c-H2A.X) at DNA damage sites was detected by fluorescent immunostaining of root tips using specific anti-c-H2A.X antibodies.



(d) Western blot analysis of levels of phosphorylated H2A.X (c-H2A.X) in untreated and 2 IM bleomycin-treated WT, AtNAP1 loss-of-function mutants m123-1 and m1234-1, NRP loss-of-function mutant m56-1, simultaneous AtNAP1 and NRP loss-of-function mutant m123456-1, AtINO80 loss-of-function mutant atino80-5 and simultaneous AtINO80 and NRP loss-of-function mutant atino80-5 m56-1 plants.

Aiwu Dong.ect. Distinct roles of the histone chaperones NAP1 and NRP and the chromatin-remodeling factor INO80 in somatic homologous recombination in Arabidopsis thaliana. The Plant Journal (2016) 88, 397-410.