

Histone H2A.X (Phospho Ser139) Antibody

Rabbit Polyclonal antibody to Histone H2A.X (Phospho Ser139)

Catalog Number **GTX50293**

Full Name H2A histone family, member X

Synonyms | H2AX | H2A.X | H2AX | H2AFX | H2AX histone | histone H2A.x | H2A histone family, member X |

Background Histones are basic nuclear proteins that are responsible for the structure of eukaryotic chromosomal fibers. H2AX is a member of the histone H2A family which is one of the four core histones making up the nucleosome core particle. Double-stranded breaks in DNA caused by replication errors, apoptosis, physiological processes and DNA damage caused by ionizing radiation, UV light or cytotoxic agents lead to phosphorylation of H2AX on serine 139. H2AX (pS139) is also referred to as H2AX (pS140) when the N-terminal methionine that is normally excised during posttranslational processing is included in amino acid sequence numbering. The phosphorylation of H2AX can be detected by Western blotting or immunofluorescence, revealing the frequency of DSBs. The phosphatidylinositol 3-kinases have been implicated in H2AX phosphorylation, but it is unclear if ATM is the primary H2AX kinase or if other members of the family such as DNA-PK and ATR contribute in a similar manner.

Host Rabbit

Clonality Polyclonal

Immunogen Peptide sequence around phosphorylation site of serine 139 (Q-A-S(p)-Q-E) derived from Human Histone H2A.X

Antigen Species Human

Cross Reactivity Human - Not yet tested in other species.

Applications ICC/IF, Western blot. The usefulness of this product in other applications has not been determined.

Application Note Suggested starting dilutions are as follows. WB: 1:500~1:1000, ICC/IF: 1:100~1:200. Not yet tested in other applications. Optimal working dilutions should be determined experimentally by the end user.

Target Histone H2AX (Phospho Ser139)

Predicted Target Size(KDa) 15

Form Supplied Liquid

Concentration 1 mg/ml

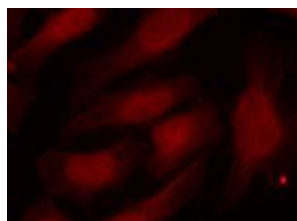
Purification Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho specific antibodies were removed by chromatography using non-phosphopeptide.

Storage Buffer saline (without Mg²⁺ and Ca²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.

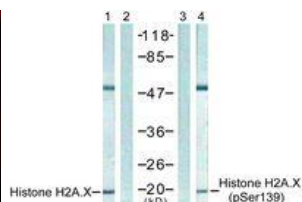
Storage Instruction Keep as concentrated solution. Aliquot and store at -20°C or below. Avoid multiple freeze-thaw cycles.

Notes For In vitro laboratory use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption.

If you use this product in your publication, please refer to GeneTex and quote the catalog number GTX50293. Please let us know about your publication so that we can update this datasheet to list your paper. Thanks!



Immunofluorescence staining of methanol-fixed HeLa cells using Histone H2A.X (Phospho-Ser139) Antibody (GTX50293).



Western blot analysis of extracts from HT29 cells untreated (lane 1) or treated with UV (lane 2) using Histone H2A.X (Phospho-Ser139) Antibody (GTX50293).

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