

[KO Validated] Histone H2AX Rabbit mAb

Catalog No.: A29451 **KO** **Validated** **Recombinant**

Basic Information

Observed MW

17 kDa

Calculated MW

15 kDa

Category

Primary antibody

Applications

WB, IP, IF/ICC, IHC-P, ChIP, ELISA

Cross-Reactivity

Human, Mouse, Rat, Monkey

CloneNo number

ARC83802

Background

Histones are basic nuclear proteins that are responsible for the nucleosome structure of the chromosomal fiber in eukaryotes. Two molecules of each of the four core histones (H2A, H2B, H3, and H4) form an octamer, around which approximately 146 bp of DNA is wrapped in repeating units, called nucleosomes. The linker histone, H1, interacts with linker DNA between nucleosomes and functions in the compaction of chromatin into higher order structures. This gene encodes a replication-independent histone that is a member of the histone H2A family, and generates two transcripts through the use of the conserved stem-loop termination motif, and the polyA addition motif.

Recommended Dilutions

WB 1:4000 - 1:20000**IP** 0.5 µg - 4 µg antibody for
1000 µg - 1200 µg extracts
of whole cells**IF/ICC** 1:400 - 1:4000**IHC-P** 1:2000 - 1:8000**ChIP** 2 µg antibody for 10 µg - 15
µg of Chromatin**ELISA** Recommended starting
concentration is 1 µg/mL.
Please optimize the
concentration based on your
specific assay
requirements. For high-ratio
antibody dilutions
(≥1:10000) a sequential
dilution method is strongly
recommended to ensure
measurement accuracy.

Immunogen Information

Gene ID

3014

Swiss Prot

P16104

Immunogen

Synthetic peptide. This information is considered to be commercially sensitive.

Synonyms

H2A.X; H2A/X; H2AFX

Product Information

Source

Rabbit

Isotype

IgG

Purification

Affinity purification

Storage

Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.09% Sodium azide, 0.05% BSA, 50% glycerol, pH7.3.

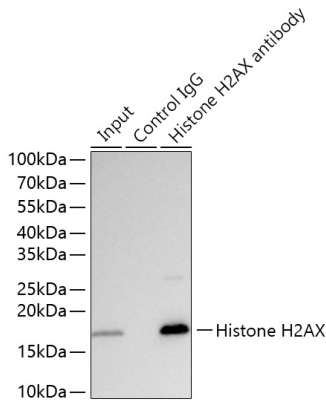
Contact

☎ | 400-999-6126

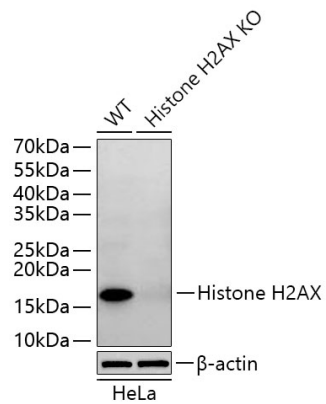
✉ | cn.market@abclonal.com.cn

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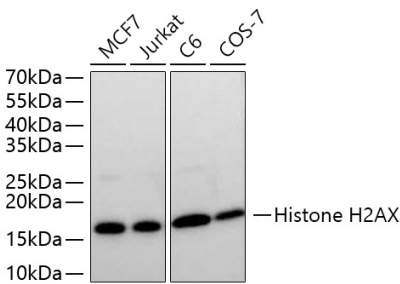
Validation Data



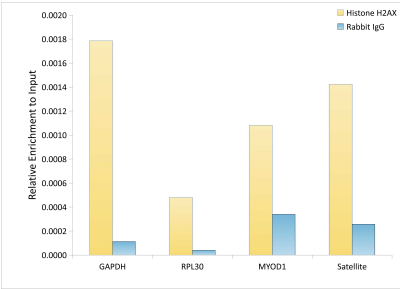
Immunoprecipitation of Histone H2AX from 1000 µg extracts of Jurkat cells was performed using 2 µg of [KO Validated] Histone H2AX Rabbit mAb (A29451). Rabbit Control IgG (AC005) was used to precipitate the Control IgG sample. IP samples were eluted with 1x Laemmli Buffer. The Input lane represents 10% of the total input. Western blot analysis of immunoprecipitates was conducted using [KO Validated] Histone H2AX Rabbit mAb (A29451) at a dilution of 1:100000.



Western blot analysis of lysates from wild type (WT) and Histone H2AX knockout (KO) HeLa cells using [KO Validated] Histone H2AX Rabbit mAb (A29451) at 1:10000 dilution incubated overnight at 4°C. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25 µg per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Exposure time: 60 s.

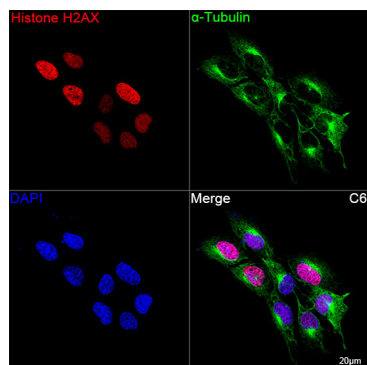


Western blot analysis of various lysates using [KO Validated] Histone H2AX Rabbit mAb (A29451) at 1:10000 dilution incubated overnight at 4°C. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25 µg per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Exposure time: 1 s.

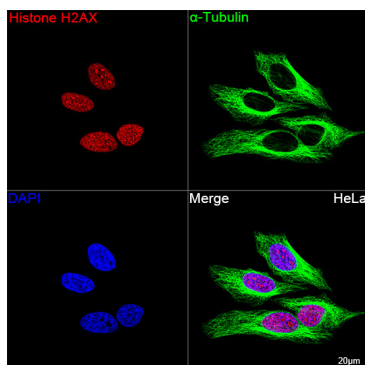


Chromatin immunoprecipitation was performed with 10 µg of cross-linked chromatin from HeLa cells, using 2 µg of [KO Validated] Histone H2AX Rabbit mAb (A29451) and Rabbit IgG isotype control (AC042). The enrichment of immunoprecipitated DNA at different genomic loci was examined by quantitative PCR. The histogram compares the ratio of the immunoprecipitated DNA to the input at given loci.

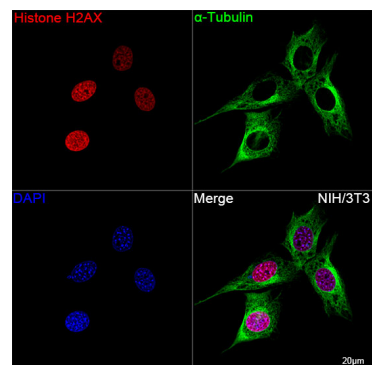
Validation Data



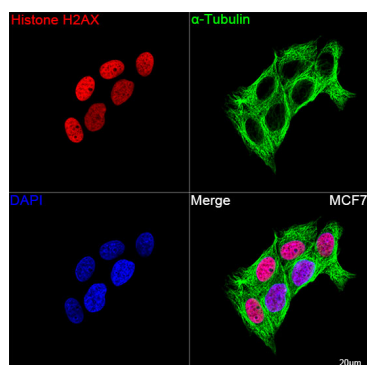
Confocal imaging of C6 cells using [KO Validated] Histone H2AX Rabbit mAb (A29451, dilution 1:500) followed by a further incubation with Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with α -Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) (AS037, dilution 1:800) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.



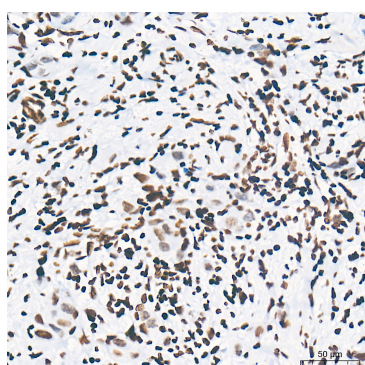
Confocal imaging of HeLa cells using [KO Validated] Histone H2AX Rabbit mAb (A29451, dilution 1:500) followed by a further incubation with Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with α -Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) (AS037, dilution 1:800) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.



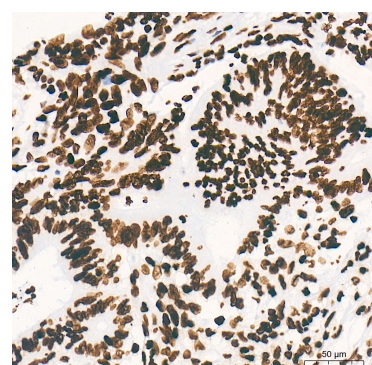
Confocal imaging of NIH/3T3 cells using [KO Validated] Histone H2AX Rabbit mAb (A29451, dilution 1:500) followed by a further incubation with Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with α -Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) (AS037, dilution 1:800) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.



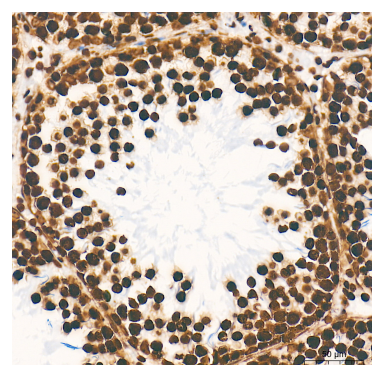
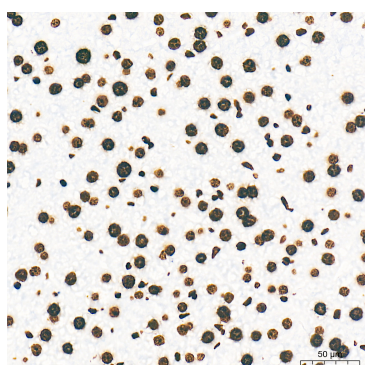
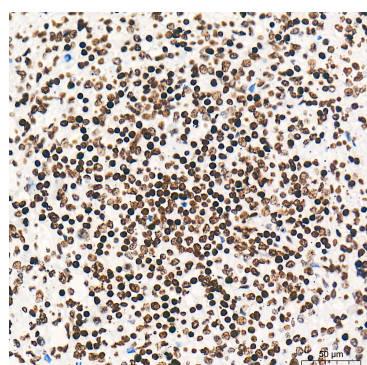
Confocal imaging of MCF7 cells using [KO Validated] Histone H2AX Rabbit mAb (A29451, dilution 1:500) followed by a further incubation with Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with α -Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) (AS037, dilution 1:800) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.



Immunohistochemistry analysis of paraffin-embedded Human breast cancer tissue using [KO Validated] Histone H2AX Rabbit mAb (A29451) at a dilution of 1:2000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Human colon carcinoma tissue using [KO Validated] Histone H2AX Rabbit mAb (A29451) at a dilution of 1:2000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



Validation Data

Immunohistochemistry analysis of paraffin-embedded Human spleen tissue using [KO Validated] Histone H2AX Rabbit mAb (A29451) at a dilution of 1:2000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.

Immunohistochemistry analysis of paraffin-embedded Mouse liver tissue using [KO Validated] Histone H2AX Rabbit mAb (A29451) at a dilution of 1:2000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.

Immunohistochemistry analysis of paraffin-embedded Rat testis tissue using [KO Validated] Histone H2AX Rabbit mAb (A29451) at a dilution of 1:2000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.