

Anti-Histone H2A.z/H2AZ1 Antibody Picoband®

Catalog Number: A31256

About H2AZ1

Histones are basic nuclear proteins that are responsible for the nucleosome structure of the chromosomal fiber in eukaryotes. Nucleosomes consist of approximately 146 bp of DNA wrapped around a histone octamer composed of pairs of each of the four core histones (H2A, H2B, H3, and H4). The chromatin fiber is further compacted through the interaction of a linker histone, H1, with the DNA between the nucleosomes to form higher order chromatin structures. This gene encodes a replication-independent member of the histone H2A family that is distinct from other members of the family. Studies in mice have shown that this particular histone is required for embryonic development and indicate that lack of functional histone H2A leads to embryonic lethality.

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Overview

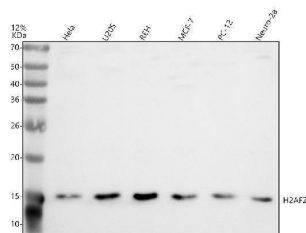
Product Name	Anti-Histone H2A.z/H2AZ1 Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-Histone H2A.z/H2AZ1 Antibody Picoband® catalog # A31256. Tested in WB, IHC, IF, Flow Cytometry, ELISA applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	ELISA, Flow Cytometry, IF, IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
Storage Instructions	At -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freezing and thawing.
Host	Rabbit
Uniprot ID	P0C0S5

Technical Details

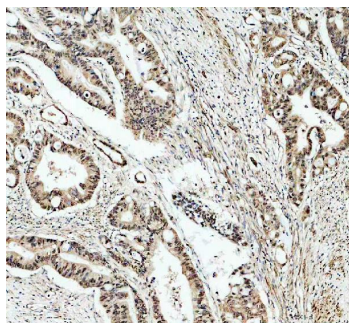
Immunogen	E.coli-derived human Histone H2A.z/H2AZ1 recombinant protein (Position: M1-V128).
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Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.25-0.5 ug/ml, Human, Mouse, Rat Immunohistochemistry(Paraffin-embedded Section), 2-5 ug/ml, Human, Mouse, Rat Immunofluorescence, 5 ug/ml, Human, Mouse, Rat Flow Cytometry (Fixed), 1-3 ug/1x10⁶ cells, Human ELISA, 0.1-0.5 ug/ml Note: For flow cytometry (FCM), validated for fixed cells only. Not validated for FACS or surface flow cytometry using live cells.

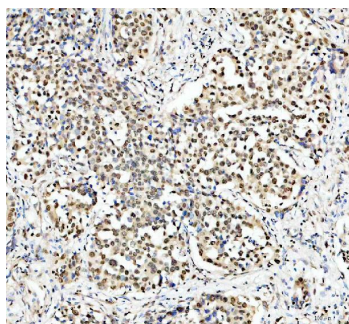
Anti-Histone H2A.z/H2AZ1 Antibody Picoband® (A31256) Images



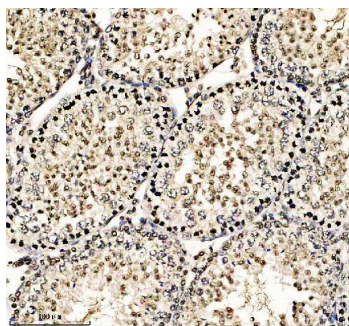
Western blot analysis of Histone H2A.z/H2AZ1 using anti-Histone H2A.z/H2AZ1 antibody (A31256). Electrophoresis was performed on a 12% SDS-PAGE gel at 80V (Stacking gel) / 120V (Resolving gel) for 2 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human Hela whole cell lysates, Lane 2: human U2OS whole cell lysates, Lane 3: human REH whole cell lysates, Lane 4: human MCF-7 whole cell lysates, Lane 5: rat PC-12 whole cell lysates, Lane 6: mouse Neuro-2a whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Histone H2A.z/H2AZ1 antigen affinity purified polyclonal antibody (A31256) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1% Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an ECL Plus Western Blotting Substrate (Catalog # AR1196-200) with Tanon 5200 system. A specific band was detected for Histone H2A.z/H2AZ1 at approximately 14 kDa. The expected band size for Histone H2A.z/H2AZ1 is at 14 kDa.



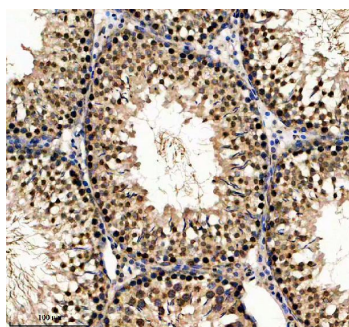
IHC analysis of Histone H2A.z/H2AZ1 using anti-Histone H2A.z/H2AZ1 antibody (A31256). Histone H2A.z/H2AZ1 was detected in a paraffin-embedded section of human colon cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-Histone H2A.z/H2AZ1 Antibody (A31256) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.



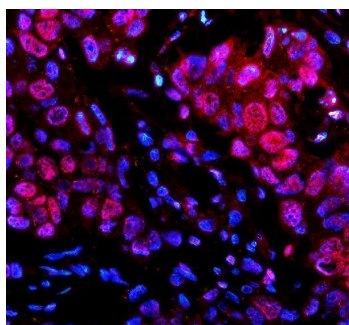
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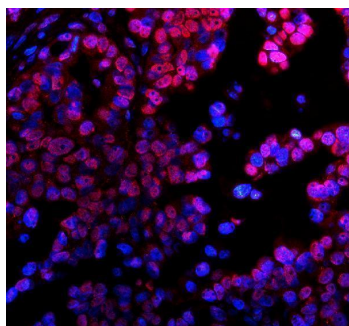
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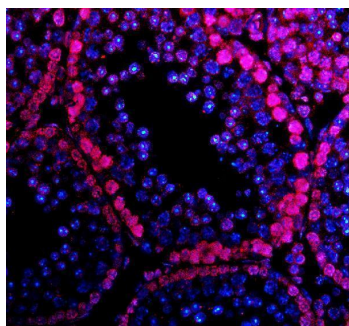
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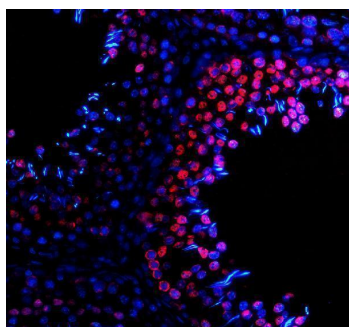
IF analysis of Histone H2A.z/H2AZ1 using anti-Histone H2A.z/H2AZ1 antibody (A31256). Histone H2A.z/H2AZ1 was detected in a paraffin-embedded section of human lung cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 5 ug/mL rabbit anti-Histone H2A.z/H2AZ1 Antibody (A31256) overnight at 4°C. Cy3 Conjugated Goat Anti-Rabbit IgG (BA1032) was used as secondary antibody at 1:500 dilution and incubated for 30 minutes at 37°C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



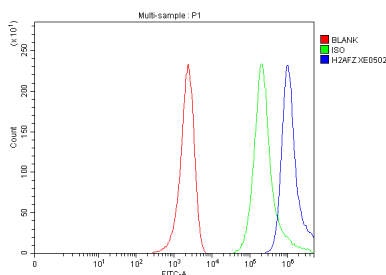
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Flow Cytometry analysis of MCF-7 cells using anti-Histone H2A.z/H2AZ1 antibody (A31256). Overlay histogram showing MCF-7 cells stained with A31256 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Histone H2A.z/H2AZ1 Antibody (A31256, 1 ug/1x10⁶ cells) for 30 min at 20°C. Fluoro488 conjugated goat anti-rabbit IgG (BA1127, 5-10 ug/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x10⁶) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

Anti-Histone H2A.z/H2AZ1 Antibody

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