

# Anti-Histone H2A.Z antibody [EPR18090] - ChIP Grade ab188314

リコンビナント RabMAb

★★★★★ **4 Abreviews** 画像数 10

### 製品の概要

製品名	Anti-Histone H2A.Z antibody [EPR18090] - ChIP Grade
製品の詳細	Rabbit monoclonal [EPR18090] to Histone H2A.Z - ChIP Grade
由来種	Rabbit
アプリケーション	<b>適用あり:</b> ChIP, PepArr, ICC/IF, WB, IHC-P, ChIP-sequencing
種交差性	<b>交差種:</b> Mouse, Rat, Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
ポジティブ・コントロール	WB: HeLa and NIH/3T3 whole cell lysates. IHC-P: Human, mouse and rat colon tissues. ICC/IF: HeLa cells. ChIP: HeLa cells.
特記事項	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"><li>- High batch-to-batch consistency and reproducibility</li><li>- Improved sensitivity and specificity</li><li>- Long-term security of supply</li><li>- Animal-free production</li></ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p>

### 製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
バッファー	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	EPR18090

## アプリケーション

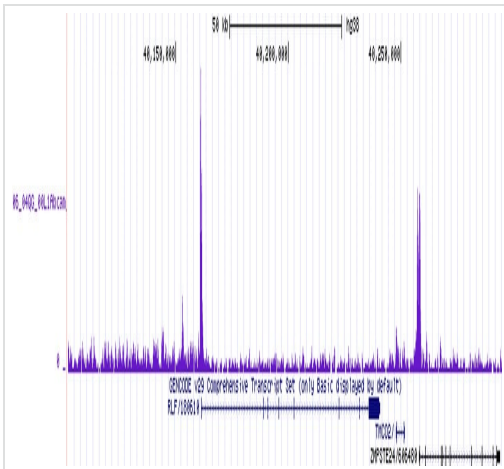
**The Abpromise guarantee** **Abpromise保証は、次のテスト済みアプリケーションにおけるab188314の使用に適用されます**  
アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
ChIP		Use 2 µg for 25 µg of chromatin.
PepArr		Use a concentration of 0.1 µg/ml.
ICC/IF		1/1000.
WB	★★★★★ (4)	1/10000. Detects a band of approximately 14 kDa (predicted molecular weight: 14 kDa).
IHC-P		1/4000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
ChIP-sequencing		Use at an assay dependent concentration.

## ターゲット情報

<b>機能</b>	Variant histone H2A which replaces conventional H2A in a subset of nucleosomes. Nucleosomes wrap and compact DNA into chromatin, limiting DNA accessibility to the cellular machineries which require DNA as a template. Histones thereby play a central role in transcription regulation, DNA repair, DNA replication and chromosomal stability. DNA accessibility is regulated via a complex set of post-translational modifications of histones, also called histone code, and nucleosome remodeling. May be involved in the formation of constitutive heterochromatin. May be required for chromosome segregation during cell division.
<b>配列類似性</b>	Belongs to the histone H2A family.
<b>翻訳後修飾</b>	Monoubiquitination of Lys-122 gives a specific tag for epigenetic transcriptional repression. Acetylated on Lys-5, Lys-8 and Lys-12 during interphase. Acetylation disappears at mitosis. Monomethylated on Lys-5 and Lys-8 by SETD6. SETD6 predominantly methylates Lys-8, lys-5 being a possible secondary site. Not phosphorylated.
<b>細胞内局在</b>	Nucleus. Chromosome.

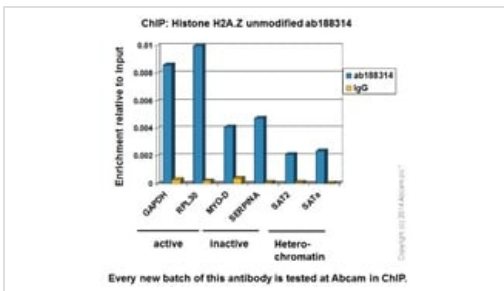
## 画像



ChIP-sequencing - Anti-Histone H2A.Z antibody [EPR18090] - ChIP Grade (ab188314)

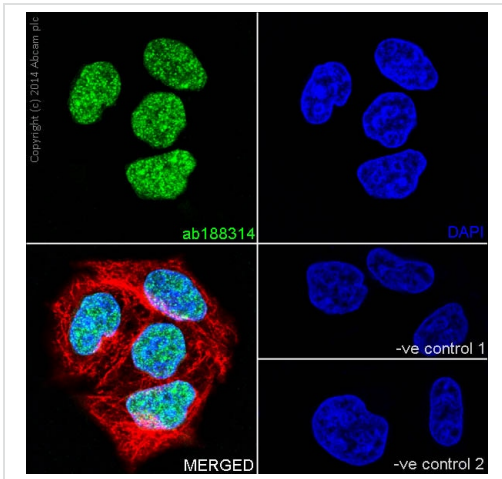
Chromatin was prepared from HeLa cells. Cells were fixed with 1% formaldehyde for 10 minutes. ChIP was performed with 30  $\mu$ g of chromatin and 4  $\mu$ g of **ab223152** [EPR18090]. ChIP DNA was sequenced on the Illumina NextSeq 500 to a depth of 10 million sequence tags. The image shows binding across a region of chromosome 1 (RLF gene). ChIP-Seq validation performed by Active Motif, Carlsbad, CA

This image was generated using **ab223152**. The same clone but a different buffer formulation.



ChIP - Anti-Histone H2A.Z antibody [EPR18090] - ChIP Grade (ab188314)

Chromatin was prepared from HeLa cells according to the Abcam X-ChIP protocol. Cells were fixed with formaldehyde for 10 minutes. The ChIP was performed with 25  $\mu$ g of chromatin, 2  $\mu$ g of ab188314 (blue), and 20  $\mu$ l of Anti rabbit IgG sepharose beads. 2  $\mu$ g of rabbit normal IgG was added to the beads control (yellow). The immunoprecipitated DNA was quantified by real time PCR (Sybr green approach).



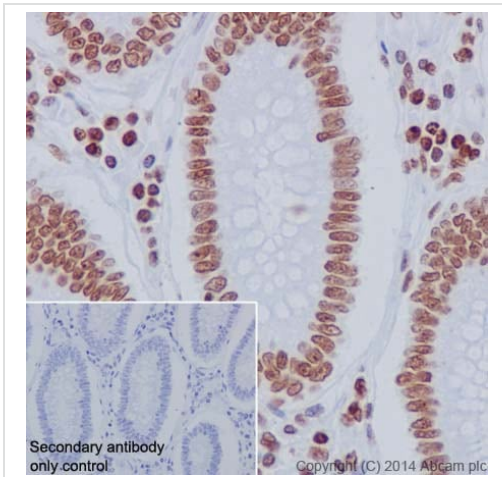
Immunocytochemistry/ Immunofluorescence - Anti-Histone H2A.Z antibody [EPR18090] - ChIP Grade (ab188314)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HeLa (Human epithelial cells from cervix adenocarcinoma) cells labeling Histone H2A.Z with ab188314 at 1/1000 dilution, followed by Goat anti-rabbit IgG (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/500 dilution (green). Confocal image showing nuclear staining on HeLa cell line. The nuclear counter stain is DAPI (blue). Tubulin is detected with **ab7291** (anti-Tubulin mouse mAb) at 1/1000 dilution and **ab150120** (AlexaFluor®594 Goat anti-Mouse secondary) at 1/500 dilution (red).

The negative controls are as follows:

-ve control 1: ab188314 at 1/1000 dilution followed by **ab150120** (AlexaFluor®594 Goat anti-Mouse secondary) at 1/500 dilution.

-ve control 2: **ab7291** (anti-Tubulin mouse mAb) at 1/1000 dilution followed by **ab150077** (Alexa Fluor®488 Goat Anti-Rabbit IgG H&L) at 1/500 dilution.

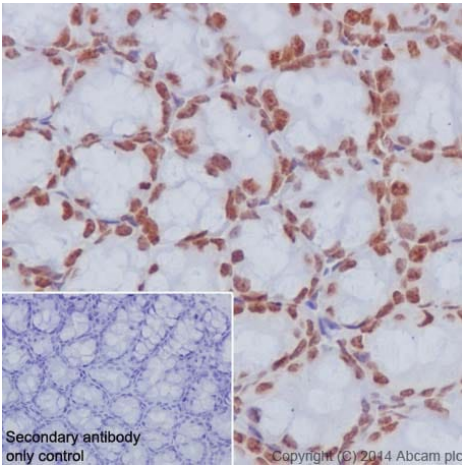


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Histone H2A.Z antibody [EPR18090] - ChIP Grade (ab188314)

Immunohistochemical analysis of paraffin-embedded Human colon tissue labeling Histone H2A.Z with ab188314 at 1/4000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) secondary antibody at 1/500 dilution. Nucleus staining on Human colon tissue is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

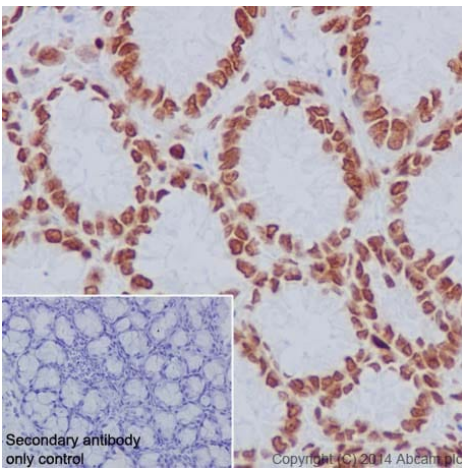


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Histone H2A.Z antibody [EPR18090] - ChIP Grade (ab188314)

Immunohistochemical analysis of paraffin-embedded Mouse colon tissue labeling Histone H2A.Z with ab188314 at 1/4000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) secondary antibody at 1/500 dilution. Nucleus staining on mouse colon tissue is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

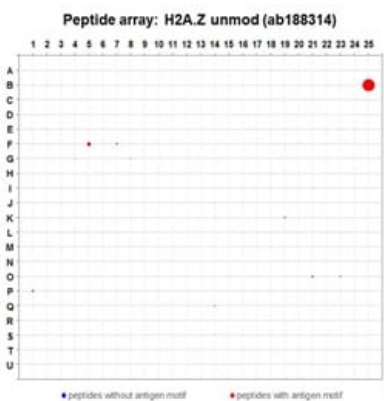


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Histone H2A.Z antibody [EPR18090] - ChIP Grade (ab188314)

Immunohistochemical analysis of paraffin-embedded Rat colon tissue labeling Histone H2A.Z with ab188314 at 1/4000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) secondary antibody at 1/500 dilution. Nucleus staining on rat colon tissue is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

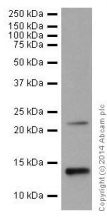


Peptide Array - Anti-Histone H2A.Z antibody [EPR18090] - ChIP Grade (ab188314)

ab188314 was tested in Peptide Array against 501 different modified and unmodified histone peptides; each peptide is printed on the array at six concentrations (each in triplicate).

Circle area represents affinity between the antibody and a peptide: all antigen-containing peptides are displayed as red circles, all other peptides as blue circles. The affinity is calculated as area under curve when antibody binding values are plotted against the corresponding peptide concentration. Each circle area is normalized to the peptide with the strongest affinity.

The complete dataset, including full list of all peptides and information on the position of each peptide in the diagram, can be downloaded [here](#).



Western blot - Anti-Histone H2A.Z antibody  
[EPR18090] - ChIP Grade (ab188314)

Anti-Histone H2A.Z antibody [EPR18090] - ChIP Grade  
(ab188314) at 1/10000 dilution + HeLa (Human epithelial cells from  
cervix adenocarcinoma) whole cell lysate at 10  $\mu$ g

### Secondary

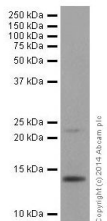
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000  
dilution

**Predicted band size:** 14 kDa

**Observed band size:** 14 kDa

**Exposure time:** 15 seconds

Blocking/Dilution buffer: 5% NFDm/TBST.



Western blot - Anti-Histone H2A.Z antibody  
[EPR18090] - ChIP Grade (ab188314)

Anti-Histone H2A.Z antibody [EPR18090] - ChIP Grade  
(ab188314) at 1/10000 dilution + NIH/3T3 (Mouse embryo  
fibroblast cells) whole cell lysate at 10  $\mu$ g

### Secondary

Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000  
dilution

**Predicted band size:** 14 kDa

**Observed band size:** 14 kDa

**Exposure time:** 10 seconds

Blocking/Dilution buffer: 5% NFDm/TBST.

### Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Anti-Histone H2A.Z antibody [EPR18090] - ChIP  
Grade (ab188314)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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