

## Product datasheet

# Anti-Histone H2A.Z antibody [EPR6172] - ChIP Grade ab124793

Recombinant RabMAb

★★★★★ [5 Abreviews](#) [4 Images](#)

### Overview

---

<b>Product name</b>	Anti-Histone H2A.Z antibody [EPR6172] - ChIP Grade
<b>Description</b>	Rabbit monoclonal [EPR6172] to Histone H2A.Z - ChIP Grade
<b>Host species</b>	Rabbit
<b>Specificity</b>	This antibody is known to detect both isoforms of H2A.Z (H2A.Z.1 and H2A.Z.2).
<b>Tested applications</b>	<b>Suitable for:</b> ChIP-sequencing, WB, IHC-P <b>Unsuitable for:</b> Flow Cyt, ICC/IF or IP
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	WB: C6, Raw 264.7, PC-12, NIH/3T3, HeLa, HepG2, and Human thymus lysates; IHC-P: Human breast tissue; ChIP-seq: Chromatin from HeLa cells.
<b>General notes</b>	<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>

### Properties

---

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
<b>Storage buffer</b>	pH: 7.20 Preservative: 0.05% Sodium azide Constituents: 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue culture supernatant
<b>Purity</b>	Protein A purified

<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR6172
<b>Isotype</b>	IgG

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab124793 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ChIP-sequencing		Use 4µg for 10 <sup>7</sup> cells.
WB	★★★★★ (5)	1/1000 - 1/10000. Predicted molecular weight: 14 kDa.
IHC-P		1/250 - 1/500. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. antigen retrieval is recommended.

**Application notes** Is unsuitable for Flow Cyt, ICC/IF or IP.

## Target

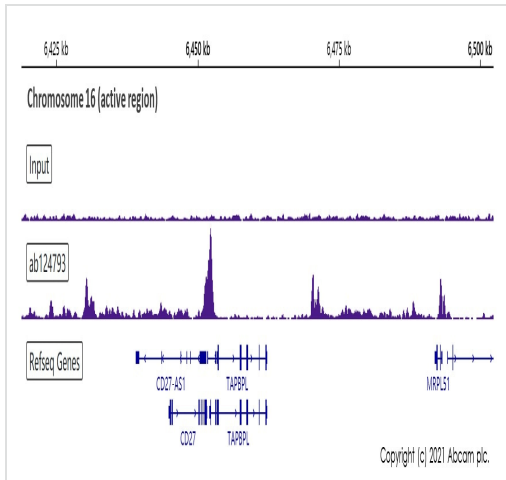
**Function** Variant histone H2A which replaces conventional H2A in a subset of nucleosomes. Nucleosomes wrap and compact DNA into chromatin, limiting DNA accessibility to the cellular machineries which require DNA as a template. Histones thereby play a central role in transcription regulation, DNA repair, 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.

**Sequence similarities** Belongs to the histone H2A family.

**Post-translational modifications** 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.

**Cellular localization** Nucleus. Chromosome.

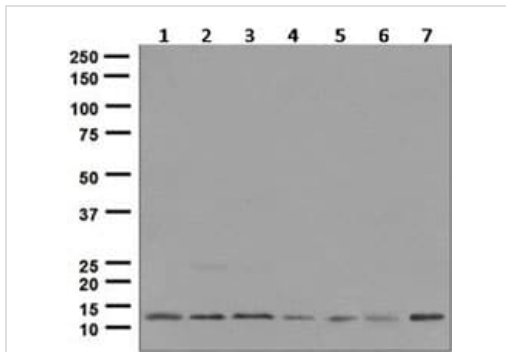
## Images



ChIP-sequencing - Anti-Histone H2A.Z antibody  
[EPR6172] - ChIP Grade (ab124793)

Chromatin was prepared from HeLa cells. Cells were fixed with 1% formaldehyde for 10 minutes. ChIP was performed with  $10^7$  HeLa cells and 4  $\mu$ g of ab124793 [EPR6172]. ChIP DNA was sequenced on the Illumina NovaSeq 6000 to a depth of 30 million reads.

Additional screenshots of mapped reads can be downloaded [here](#).



Western blot - Anti-Histone H2A.Z antibody  
[EPR6172] - ChIP Grade (ab124793)

**All lanes** : Anti-Histone H2A.Z antibody [EPR6172] - ChIP Grade  
(ab124793) at 1/1000 dilution

**Lane 1** : C6 lysates

**Lane 2** : Raw 264.7 lysates

**Lane 3** : PC-12 lysates

**Lane 4** : NIH/3T3 lysates

**Lane 5** : HeLa lysates

**Lane 6** : HepG2 lysates

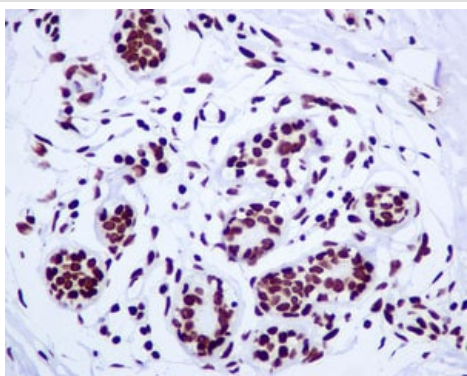
**Lane 7** : Human thymus lysates

Lysates/proteins at 10  $\mu$ g per lane.

### Secondary

**All lanes** : HRP labelled goat anti-rabbit at 1/2000 dilution

**Predicted band size:** 14 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Histone H2A.Z antibody [EPR6172] - ChIP Grade (ab124793)

ab124793, at a 1/250 dilution, staining Histone H2A.Z in paraffin embedded Human breast tissue by Immunohistochemistry.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

### 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 [EPR6172] - ChIP Grade (ab124793)

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

### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

### **Terms and conditions**

---

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors