

### Anti-Histone H2A (acetyl K5) antibody [EP856Y] ab45152

リコンビナント **RabMAb**

★★★★☆ [14 Abreviews](#) [11 References](#) [画像数 8](#)

#### 製品の概要

製品名	Anti-Histone H2A (acetyl K5) antibody [EP856Y]
製品の詳細	Rabbit monoclonal [EP856Y] to Histone H2A (acetyl K5)
由来種	Rabbit
アプリケーション	<b>適用あり:</b> WB, IHC-P, ICC/IF, IP
種交差性	<b>交差種:</b> Mouse, Rat, Human <b>交差が予測される動物種:</b> Caenorhabditis elegans 
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	Human breast carcinoma tissue and C6 cell lysate.
特記事項	This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information <a href="#">see here</a> . 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> .

#### 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. Avoid freeze / thaw cycle.
バッファー	pH: 7.20 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	EP856Y
アイソタイプ	IgG

## アプリケーション

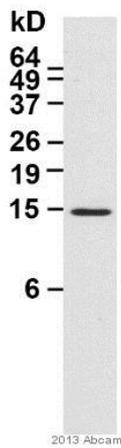
**The Abpromise guarantee**      **Abpromise保証は、次のテスト済みアプリケーションにおけるab45152の使用に適用されます**  
アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
WB	★★★★★ (7)	1/100000. Predicted molecular weight: 14 kDa.
IHC-P	★★★★★ (2)	1/250 - 1/2000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
ICC/IF	★★★★★ (3)	1/200 - 1/1000.
IP		1/20.

## ターゲット情報

機能	Core component of nucleosome. 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.
配列類似性	Belongs to the histone H2A family.
翻訳後修飾	<p>The chromatin-associated form is phosphorylated on Thr-121 during mitosis.</p> <p>Deiminated on Arg-4 in granulocytes upon calcium entry.</p> <p>Monoubiquitination of Lys-120 by RING1 and RNF2/RING2 complex gives a specific tag for epigenetic transcriptional repression and participates in X chromosome inactivation of female mammals. It is involved in the initiation of both imprinted and random X inactivation. Ubiquitinated H2A is enriched in inactive X chromosome chromatin. Ubiquitination of H2A functions downstream of methylation of 'Lys-27' of histone H3. Monoubiquitination of Lys-120 by RNF2/RING2 can also be induced by ultraviolet and may be involved in DNA repair. Following DNA double-strand breaks (DSBs), it is ubiquitinated through 'Lys-63' linkage of ubiquitin moieties by the E2 ligase UBE2N and the E3 ligases RNF8 and RNF168, leading to the recruitment of repair proteins to sites of DNA damage. Monoubiquitination and ionizing radiation-induced 'Lys-63'-linked ubiquitination are distinct events.</p> <p>Phosphorylation on Ser-2 is enhanced during mitosis. Phosphorylation on Ser-2 by RPS6KA5/MSK1 directly represses transcription. Acetylation of H3 inhibits Ser-2 phosphorylation by RPS6KA5/MSK1.</p> <p>Symmetric dimethylation on Arg-4 by the PRDM1/PRMT5 complex may play a crucial role in the germ-cell lineage.</p>
細胞内局在	Nucleus. Chromosome.

## 画像



Western blot - Anti-Histone H2A (acetyl K5) antibody [EP856Y] (ab45152)

This image is courtesy of an anonymous Abreview

Anti-Histone H2A (acetyl K5) antibody [EP856Y] (ab45152) at 1/1000 dilution (unpurified) + Mouse cortex whole tissue lysate at 20 µg

**Secondary**

HRP-conjugated Goat anti-rabbit IgG polyclonal at 1/2000 dilution

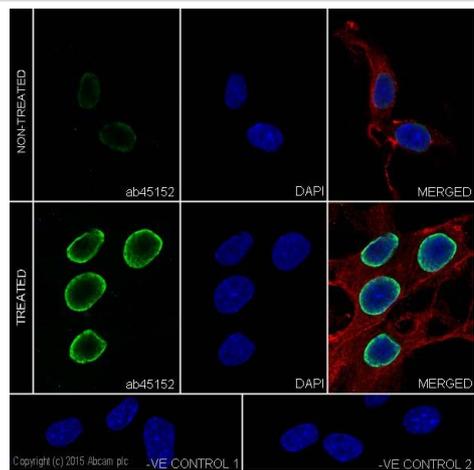
Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size:** 14 kDa

**Observed band size:** 15 kDa

**Exposure time:** 1 minute

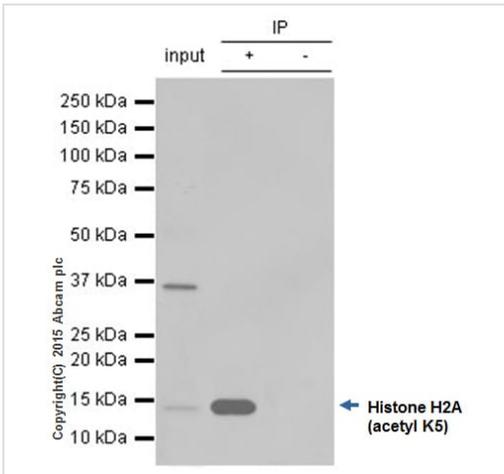


Immunocytochemistry/ Immunofluorescence - Anti-Histone H2A (acetyl K5) antibody [EP856Y] (ab45152)

ab45152 staining Histone H2A (acetyl K5) in C6 (rat glioma) cells, treated and untreated with TSA, 500ng/ml for 4 hours by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with 4% Paraformaldehyde and permeabilized with 0.1% Triton X-100. Samples were incubated with primary antibody at a dilution of 1/200. A goat anti rabbit IgG (Alexa Fluor® 488) (**ab150077**) was used as the secondary antibody. **ab7291** and **ab150120** were used as counterstains for primary antibody **ab75748** and secondary antibody **ab150077** respectively and DAPI was used as a nuclear counterstain.

**Negative control 1:** Rabbit primary antibody and anti-mouse secondary antibody (**ab150120**)

**Negative control 2:** Mouse primary antibody (**ab7291**) and anti-rabbit secondary antibody (**ab150077**)



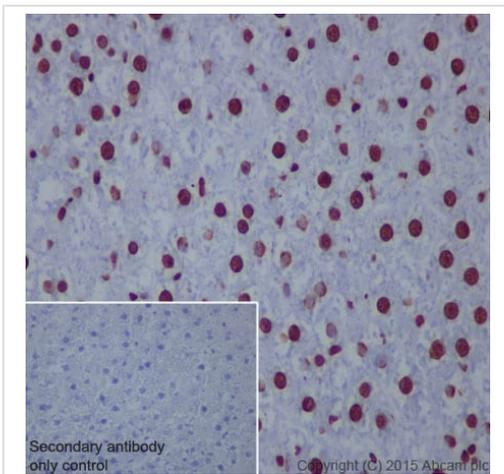
Immunoprecipitation - Anti-Histone H2A (acetyl K5) antibody [EP856Y] (ab45152)

ab45152 immunoprecipitating Histone H2A. 10µg of cell lysate was incubated with primary antibody at a dilution of 1/20 and VeriBlot for IP Detection Reagent (HRP) ([ab131366](#)) at a dilution of 1/10000.

**Lane 1:** Mouse brain whole cell lysate

**Lane 2:** Mouse brain whole cell lysate

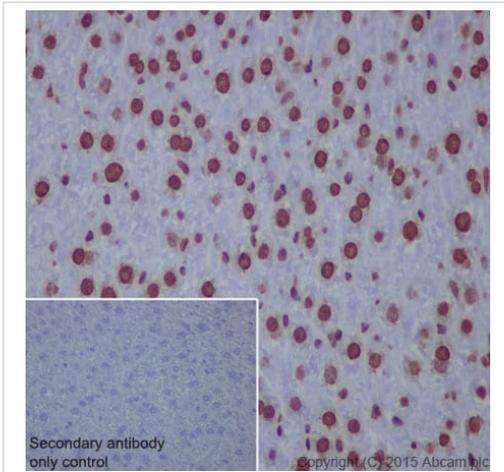
**Lane 3:** Rabbit monoclonal IgG ([ab172730](#)) instead of ab45152 in Mouse brain whole cell lysate



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Histone H2A (acetyl K5) antibody [EP856Y] (ab45152)

ab45152 staining Histone H2A (acetyl K5) in rat liver tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with paraformaldehyde and antigen retrieval was by heat mediation in a EDTA buffer. Samples were incubated with primary antibody at a dilution of 1/2000. A goat anti-rabbit IgG H&L (HRP) [ab97051](#) was used as the secondary antibody at a dilution of 1/500.

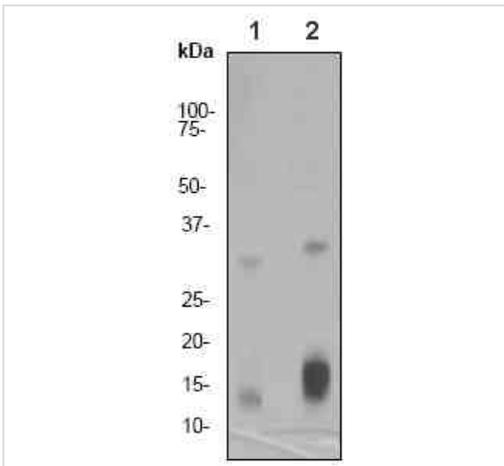
**Negative control 1:** PBS in place of primary antibody.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Histone H2A (acetyl K5) antibody [EP856Y] (ab45152)

ab45152 staining Histone H2A (acetyl K5) in mouse liver tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with paraformaldehyde and antigen retrieval was by heat mediation in a EDTA buffer. Samples were incubated with primary antibody at a dilution of 1/2000. A goat anti-rabbit IgG H&L (HRP) **ab97051** was used as the secondary antibody at a dilution of 1/500.

**Negative control 1:** PBS in place of primary antibody.



Western blot - Anti-Histone H2A (acetyl K5) antibody [EP856Y] (ab45152)

**All lanes :** Anti-Histone H2A (acetyl K5) antibody [EP856Y] (ab45152) at 1/100000 dilution (unpurified)

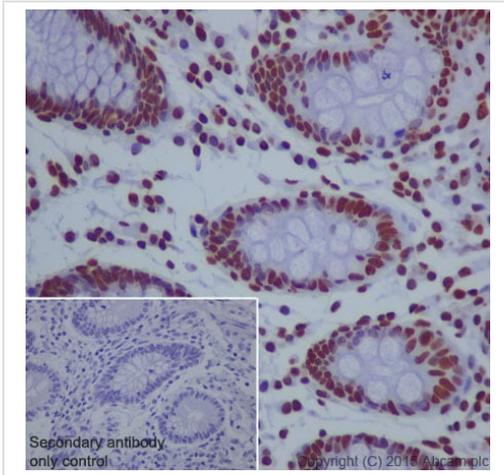
**Lane 1 :** C6 cell lysate

**Lane 2 :** C6 + TSA membrane

**Predicted band size:** 14 kDa

**Observed band size:** 14 kDa

**Additional bands at:** 34 kDa. We are unsure as to the identity of these extra bands.



ab45152 staining Histone H2A (acetyl K5) in human colon tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with paraformaldehyde and antigen retrieval was by heat mediation in a EDTA buffer. Samples were incubated with primary antibody at a dilution of 1/2000. A goat anti-rabbit IgG H&L (HRP) [ab97051](#) was used as the secondary antibody at a dilution of 1/500.

**Negative control 1:** PBS in place of primary antibody.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Histone H2A (acetyl K5) antibody [EP856Y] (ab45152)

Why choose a recombinant antibody?

 <p><b>Research with confidence</b> Consistent and reproducible results</p>	 <p><b>Long-term and scalable supply</b> Recombinant technology</p>
 <p><b>Success from the first experiment</b> Confirmed specificity</p>	 <p><b>Ethical standards compliant</b> Animal-free production</p>

Anti-Histone H2A (acetyl K5) antibody [EP856Y] (ab45152)

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