abcam

Product datasheet

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



重组 RabMAb

★★★★ 14 Abreviews 11 References 8 图像

概述

产品名称 Anti-Histone H2A (acetyl K5)抗体[EP856Y]

描述 兔单克隆抗体[EP856Y] to Histone H2A (acetyl K5)

宿主 Rabbit

经测试应用 适用于: WB, IHC-P, ICC/IF, IP 种属反应性 与反应: Mouse, Rat, Human

预测可用于: Caenorhabditis elegans ◆

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

阳性对照 Human breast carcinoma tissue and C6 cell lysate.

常规说明 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 see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

性能

形式 Liquid

存放说明 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Avoid freeze / thaw cycle.

存储溶液 pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

纯度 Protein A purified

克隆 单克隆 克隆编号 **EP856Y**

同种型 ΙgG

The Abpromise guarantee

Abpromise™承诺保证使用ab45152于以下的经测试应用

"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
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.

靶标

功能

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.

序列相似性

翻译后修饰

Belongs to the histone H2A family.

The chromatin-associated form is phosphorylated on Thr-121 during mitosis.

Deiminated on Arg-4 in granulocytes upon calcium entry.

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.

Phosphorylation on Ser-2 is enhanced during mitosis. Phosphorylation on Ser-2 by

 $RPS6KA5/MSK1\ directly\ represses\ transcription.\ Acetylation\ of\ H3\ inhibits\ Ser-2\ phosphorylation$

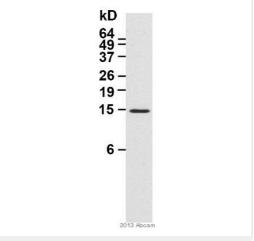
by RPS6KA5/MSK1.

Symmetric dimethylation on Arg-4 by the PRDM1/PRMT5 complex may play a crucial role in the germ-cell lineage.

细胞定位

Nucleus. Chromosome.

图片



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

This image is courtesy of an anonymous Abreview

Exposure time: 1 minute

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.

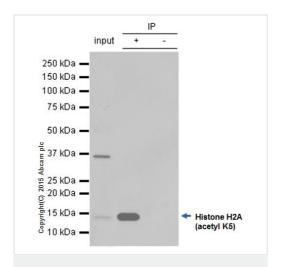
Predicted band size: 14 kDa Observed band size: 15 kDa

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 lgG (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 antirabbit secondary antibody (ab150077)



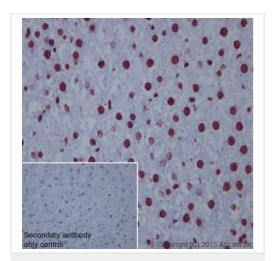
Immunoprecipitation - Anti-Histone H2A (acetyl K5) antibody [EP856Y] (ab45152)

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

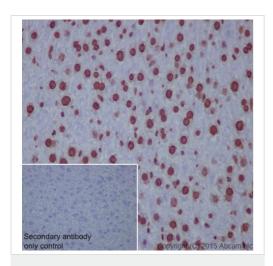
 $\mbox{\bf Lane 3:} \ \mbox{Rabbit monoclonal lgG } (\mbox{\bf \underline{ab172730}}) \ \mbox{instead of ab45152 in} \\ \mbox{Mouse brain whole cell lysate}$



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

ab45152 staining Histone H2A (acetyl K5) in rat liver tissue sections by Immunohistochemistry (IHC-P - paraformaldehydefixed, 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.

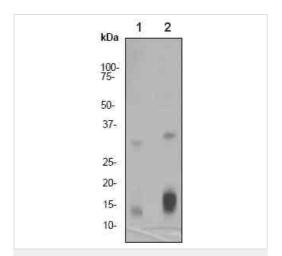
Negative control 1: PBS in place of primary antibody.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded 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)

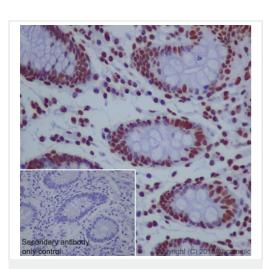
Lane 1: C6 cell lysate

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

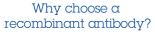
these extra bands.



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

ab45152 staining Histone H2A (acetyl K5) in human colon tissue sections by Immunohistochemistry (IHC-P - paraformaldehydefixed, 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.





Research with Consistent and reproducible results

Long-term and scalable supply Recombinant technology





first experiment Confirmed specificity

Success from the Ethical standards compliant Animal-free production

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

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