abcam

Product datasheet

Anti-Histone H2A (phospho S129) antibody ab15083

★★★★★ 3 Abreviews 85 References 4 图像

概述

产品名称	Anti-Histone H2A (phospho S129)**抗体**
描述	**兔多克隆抗体**to Histone H2A (phospho S129)
宿主	Rabbit
经测试应用	**适用于:** WB, ELISA, PepArr
种属反应性	**与反应:** Saccharomyces cerevisiae **不与反应:** Human
免疫原	Synthetic peptide corresponding to Saccharomyces cerevisiae Histone H2A aa 100 to the C-terminus (phospho S129) conjugated to bovine serum albumin. Database link: **P04911**
常规说明	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

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 or -80°C. Avoid freeze / thaw cycle.
存储溶液	pH: 7.40 Preservative: 0.02% Sodium azide Constituent: PBS Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.
纯度	Immunogen affinity purified
克隆	**多克隆**

同种型	IgG

应用

The Abpromise guarantee Abpromise™承诺保证使用ab15083于以下的经测试应用

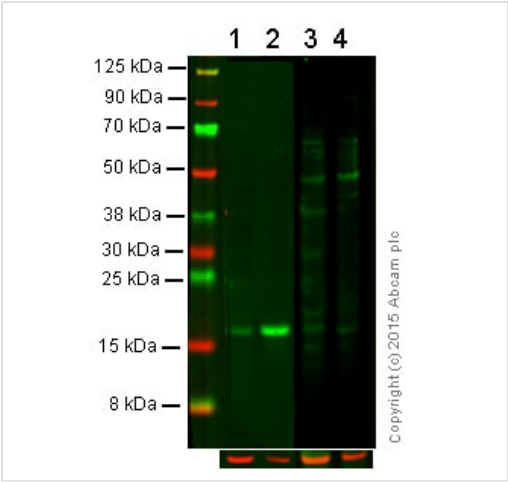
"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB	★★★★★ (2)	1/500 - 1/1000. Detects a band of approximately 14 kDa (predicted molecular weight: 14 kDa).
ELISA		Use at an assay dependent concentration.
PepArr		Use a concentration of 0.2 - 0.02 µg/ml.

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	Belongs to the histone H2A family.
翻译后修饰	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 (phospho S129) antibody (ab15083)

All lanes : Anti-Histone H2A (phospho S129) antibody (ab15083) at 1/500 dilution

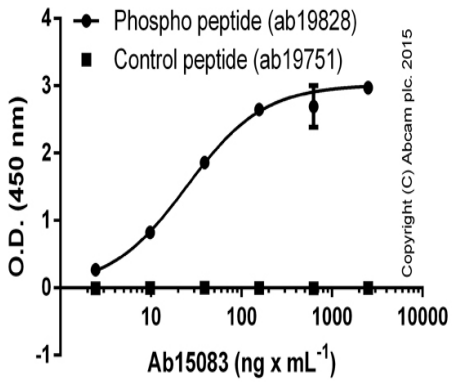
Lane 1 : S.cerevisiae yeast extract (SCYE) + control peptide with Human Histone H2A peptide (**ab19751**)
Lane 2 : S.cerevisiae yeast extract with 0.2 % Methyl methanesulfonate (1 hour) with Human Histone H2A peptide (**ab19751**)
Lane 3 : SCYE + phospho peptide with Histone H2A peptide - phospho S129 (**ab19828**)
Lane 4 : SCYE_M + phospho peptide with Histone H2A peptide - phospho S129 (**ab19828**)

Lysates/proteins at 10 µg per lane.

Performed under reducing conditions.

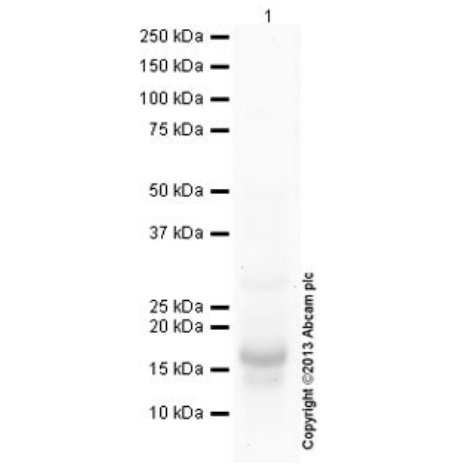
Predicted band size: 14 kDa

The blots were produced using a 4-12% Bis-tris gel under the MES buffer system. The gel was run at 200V for 35 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membranes were then blocked for an hour. 1 microgram per mL of control- (**ab19751**, lane 1 and 2) or phospho-peptides (**ab19828**, lane 3 and 4) were added to the primary antibody ab15083 (rabbit anti-Histone H2A (phospho S129) antibody; diluted 1:500) and loading control **ab125247** (mouse anti-GAPDH antibody; diluted 1:20000) and the membranes were incubated with peptide/antibody mixture for 24 hours at 4°C. Antibody binding was detected using infrared (IR)-labelled goat anti-rabbit (green) and IR-labelled goat anti-mouse (red; insert below) antibodies, diluted 1:20,000, for 1 hour at room temperature before imaging.



ELISA - Anti-Histone H2A (phospho S129) antibody (ab15083)

Serially diluted ab15083 was bound to immobilised phospho (**ab19828**) - or control (**ab19751**) peptides (1 microgram x mL^{-1}). The antibody was detected by HRP-labelled goat anti-rabbit IgG (**ab97080**; diluted 50000 times) and signal was developed with TMB substrate.



Western blot - Anti-Histone H2A (phospho S129) antibody (ab15083)

Anti-Histone H2A (phospho S129) antibody (ab15083) at 1 µg/ml + S.cerevisiae (Y190) Whole Cell Lysate at 10 µg

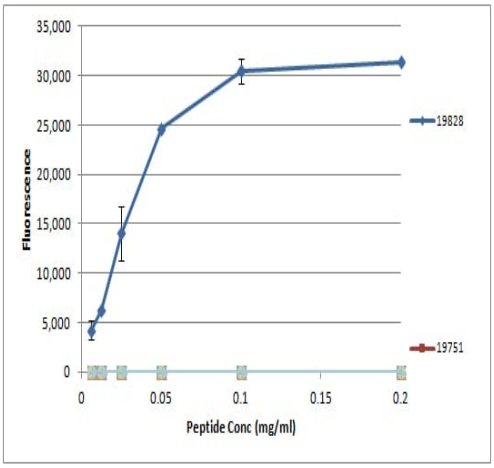
Secondary
Goat Anti-Rabbit IgG H&L (HRP) preadsorbed (**ab97080**) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 14 kDa
Additional bands at: 17 kDa. We are unsure as to the identity of these extra bands.

Exposure time: 90 seconds



Peptide Array - Anti-Histone H2A (phospho S129) antibody (ab15083)

All batches of ab15083 are tested in Peptide Array against peptides to different Histone H2A modifications. Six dilutions of each peptide are printed on to the Peptide Array in triplicate and results are averaged before being plotted on to a graph. Results show strong binding to Histone H2A - phospho S129 (**ab19828**), indicating that this antibody specifically recognises the Histone H2A - phospho S129 modification.

ab19828 - Histone H2A - phospho S129

ab19751 - Histone H2A - unmodified

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