


Anti-Histone H4 antibody - CHIP Grade ab7311

★★★★★ [12 Abreviews](#) [102 References](#) [画像数 5](#)

製品の概要

製品名	Anti-Histone H4 antibody - CHIP Grade
製品の詳細	Rabbit polyclonal to Histone H4 - CHIP Grade
由来種	Rabbit
アプリケーション	適用あり: IHC-P, ICC/IF, ChIP, WB
種交差性	交差種: Mouse, Cow, Human, Saccharomyces cerevisiae 交差が予測される動物種: Mammals 
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	Calf Thymus Histone Preparation; Hela whole cell extract
特記事項	<p>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.</p> <p>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</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 or -80°C. Avoid freeze / thaw cycle.
バッファー	pH: 7.40 Preservative: 0.02% Sodium azide Constituent: PBS
精製度	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. Immunogen affinity purified
ポリ/モノ	ポリクローナル
アイソタイプ	IgG

アプリケーション

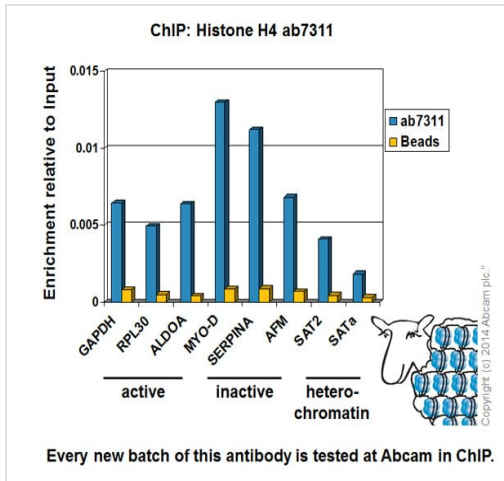
The Abpromise guarantee Abpromise保証は、次のテスト済みアプリケーションにおけるab7311の使用に適用されます
アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご確認ください。

アプリケーション	Abreviews	特記事項
IHC-P	★★★★★ (1)	Use a concentration of 1 µg/ml. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
ICC/IF	★★★★★ (2)	1/200.
ChIP	★★★★★ (4)	Use 2 µg for 25 µg of chromatin.
WB	★★★★★ (5)	1/500 - 1/1000. Detects a band of approximately 14 kDa (predicted molecular weight: 11 kDa).

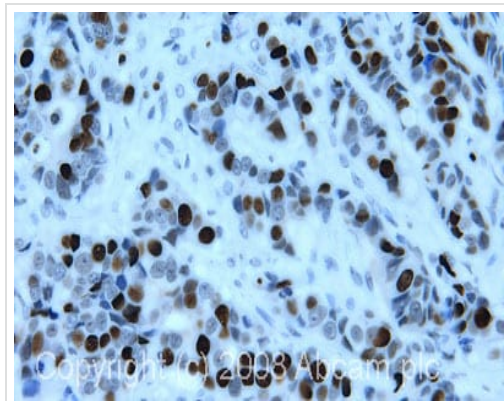
ターゲット情報

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 H4 family.
翻訳後修飾	Acetylation at Lys-6 (H4K5ac), Lys-9 (H4K8ac), Lys-13 (H4K12ac) and Lys-17 (H4K16ac) occurs in coding regions of the genome but not in heterochromatin. Citullination at Arg-4 (H4R3ci) by PADI4 impairs methylation. Monomethylation and asymmetric dimethylation at Arg-4 (H4R3me1 and H4R3me2a, respectively) by PRMT1 favors acetylation at Lys-9 (H4K8ac) and Lys-13 (H4K12ac). Demethylation is performed by JMJD6. Symmetric dimethylation on Arg-4 (H4R3me2s) by the PRDM1/PRMT5 complex may play a crucial role in the germ-cell lineage. Monomethylated, dimethylated or trimethylated at Lys-21 (H4K20me1, H4K20me2, H4K20me3). Monomethylation is performed by SET8. Trimethylation is performed by SUV420H1 and SUV420H2 and induces gene silencing. Ubiquitinated by the CUL4-DDB-RBX1 complex in response to ultraviolet irradiation. This may weaken the interaction between histones and DNA and facilitate DNA accessibility to repair proteins. Monoubiquitinated at Lys-92 of histone H4 (H4K91ub1) in response to DNA damage. The exact role of H4K91ub1 in DNA damage response is still unclear but it may function as a licensing signal for additional histone H4 post-translational modifications such as H4 Lys-21 methylation (H4K20me). Sumoylated, which is associated with transcriptional repression.
細胞内局在	Nucleus. Chromosome.

画像



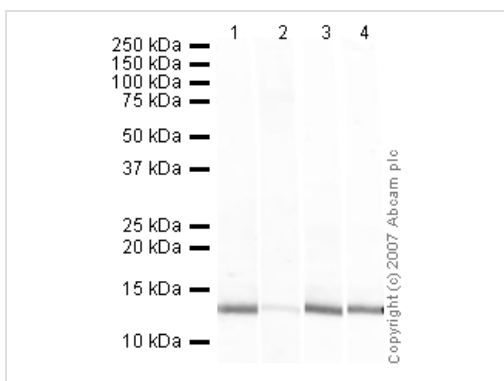
ChIP - Anti-Histone H4 antibody - ChIP Grade (ab7311)



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Histone H4 antibody - ChIP Grade (ab7311)

Chromatin was prepared from Hela cells according to the Abcam X-ChIP protocol. Cells were fixed with formaldehyde for 10min. The ChIP was performed with 25µg of chromatin, 2µg of ab7311 (blue), and 20µl of Protein A/G sepharose beads. No antibody was added to the beads control (yellow). The immunoprecipitated DNA was quantified by real time PCR (Taqman approach). Primers and probes are located in the first kb of the transcribed region.

IHC image of Histone H4 staining in human breast carcinoma FFPE section, performed on a Bond™ system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab7311, 1µg/ml, for 8 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Western blot - Anti-Histone H4 antibody - ChIP Grade (ab7311)

All lanes : Anti-Histone H4 antibody - ChIP Grade (ab7311) at 1/500 dilution

Lane 1 : Calf thymus histone extract

Lane 2 : Calf thymus histone extract with Human Histone H4 peptide ([ab21044](#)) at 1 µg/ml

Lane 3 : Calf thymus histone extract with Histone H4 peptide - acetyl K16 ([ab22376](#)) at 1 µg/ml

Lane 4 : Calf thymus histone extract with Human Histone H4 (acetyl K20) peptide ([ab20632](#)) at 1 µg/ml

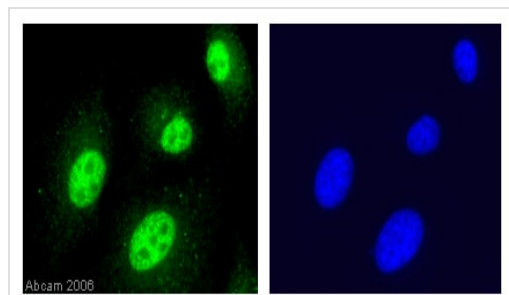
Lysates/proteins at 0.5 µg per lane.

Secondary

All lanes : Alexa-Fluor Goat anti-rabbit IgG at 1/10000 dilution

Predicted band size: 11 kDa

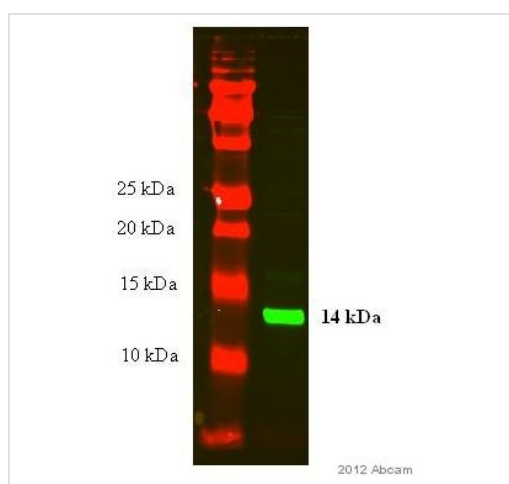
Observed band size: 14 kDa



Immunocytochemistry/ Immunofluorescence - Anti-Histone H4 antibody - ChIP Grade (ab7311)

This image is courtesy of Darin McDonald

SKN-SH cells were fixed in 4% paraformaldehyde for 10 mins, permeabilized in PBS-0.5% Triton X-100 for 5 mins and incubated for 30 minutes with ab7311 (1/200 dilution). The slides were rinsed once in PBS-Triton (0.1%), twice in PBS then incubated with the secondary antibody for 30 mins. The DNA is stained with DAPI (blue). Clear nuclear staining with ab7311 can be seen (green).



Western blot - Anti-Histone H4 antibody - ChIP Grade (ab7311)

This image is courtesy of an Abreview submitted by Rodrigo Alves.

Anti-Histone H4 antibody - ChIP Grade (ab7311) at 1/500 dilution + Human Bone Whole Tissue Lysate at 25 µg with BSA, 1 Hour, 23°C at 5 %

Developed using the ECL technique.

Predicted band size: 11 kDa

Exposure time: 1 minute

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