


Anti-Histone H4 (mono methyl R3) antibody ab17339

★★★★★ [2 Abreviews](#) [13 References](#) [画像数 4](#)

製品の概要

製品名	Anti-Histone H4 (mono methyl R3) antibody
製品の詳細	Rabbit polyclonal to Histone H4 (mono methyl R3)
由来種	Rabbit
特異性	ab17339 detects a 14 kDa band in single lane Western Blot. Peptide inhibition in Western Blot hasn't been processed. Modification specificity is determined by Peptide Array. ab17339 binds strongly to the Histone H4 mono methyl R3 peptide. From Jan 2024, QC testing of replenishment batches of this polyclonal changed. All tested and expected application and reactive species combinations are still covered by our Abcam product promise. However, we no longer test all applications. For more information on a specific batch, please contact our Scientific Support who will be happy to help.
アプリケーション	適用あり: WB, ICC/IF, PepArr
種交差性	交差種: Mouse, Rat, Cow, Human 交差が予測される動物種: Pig 
免疫原	Synthetic peptide within Human Histone H4 aa 1-100 (N terminal) (mono methyl R3) conjugated to keyhole limpet haemocyanin. The exact sequence is proprietary. (Peptide available as ab17770)
ポジティブ・コントロール	WB: Calf thymus histone, HL60 whole cell, HeLa nuclear - triton prep, NIH3T3 nuclear- triton prep, PC12 nuclear - triton prep, HL60 whole cell lysate. ICC/IF: HepG2 cells
特記事項	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

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

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.

精製度

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ab17339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	★★★★☆ (2)	Use a concentration of 1 µg/ml. Detects a band of approximately 14 kDa (predicted molecular weight: 15 kDa).
ICC/IF		Use a concentration of 1 µg/ml.
PepArr		Use a concentration of 0.2 - 0.02 µg/ml.

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

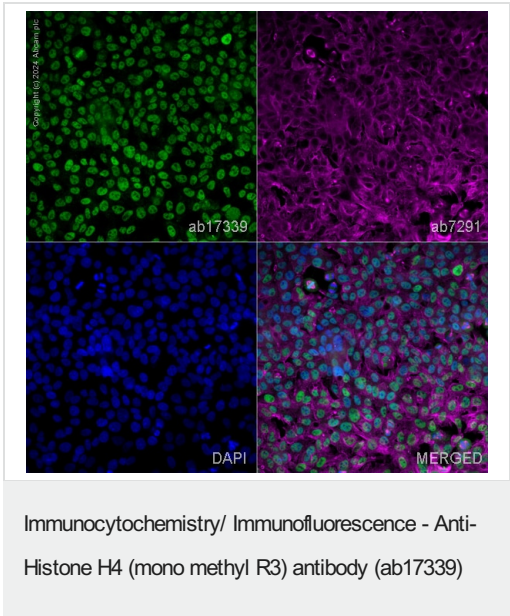
Belongs to the histone H4 family.

翻訳後修飾

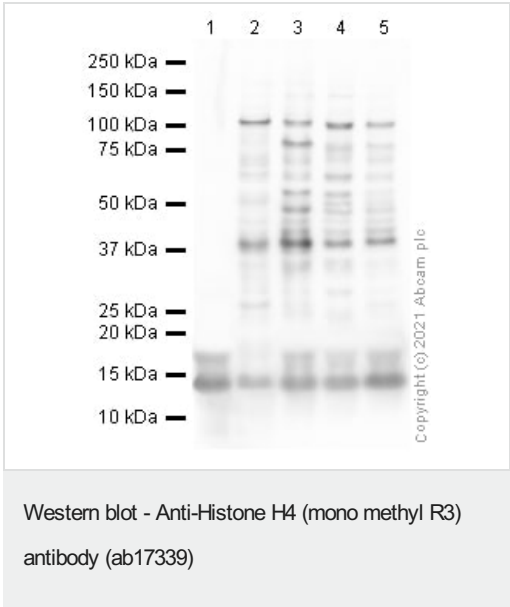
Acetylation at Lys-6 (H4K5ac), Lys-9 (H4K8ac), Lys-13 (H4K12ac) and Lys-17 (H4K16ac) occurs in coding regions of the genome but not in heterochromatin.
Citrullination at Arg-4 (H4R3ci) by PAD4 impairs methylation.
Monomethylation and asymmetric dimethylation at Arg-4 (H4R3me1 and H4R3me2a, respectively) 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



ab17339 staining Histone H4 (mono methyl R3) in HepG2 cells. The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.1% PBS-Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1%PBS-Tween for 1h. The cells were then incubated overnight at 4°C with ab17339 at 1µg/ml and **ab7291**, Mouse monoclonal [DM1A] to alpha Tubulin - Loading Control. Cells were then incubated with **ab150081**, Goat polyclonal Secondary Antibody to Rabbit IgG - H&L (Alexa Fluor® 488), pre-adsorbed at 1/1000 dilution (shown in green) and **ab150120**, Goat polyclonal Secondary Antibody to Mouse IgG - H&L (Alexa Fluor® 594), pre-adsorbed at 1/1000 dilution (shown in pseudocolour magenta). Nuclear DNA was labelled with DAPI (shown in blue). Image was acquired with a high-content analyser (Operetta CLS, Perkin Elmer) and a maximum intensity projection of confocal sections is shown.



All lanes : Anti-Histone H4 (mono methyl R3) antibody (ab17339) at 1 µg/ml

- Lane 1 :** Calf thymus histone at 0.1 µg with BSA
- Lane 2 :** HL60 whole cell at 10 µg with BSA
- Lane 3 :** HeLa Nuclear - Triton prep at 10 µg with BSA
- Lane 4 :** NIH3T3 Nuclear - Triton prep at 10 µg with BSA
- Lane 5 :** PC-12 Nuclear - Triton prep at 10 µg with BSA

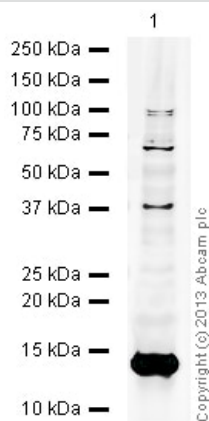
Blocking peptides at 2 % per lane.

Secondary

All lanes : Goat polyclonal to Rabbit IgG - H&L - Pre-Adsorbed (HRP) at 1/5000 dilution

Predicted band size: 15 kDa

Exposure time: 2 minutes



Western blot - Anti-Histone H4 (mono methyl R3) antibody (ab17339)

Anti-Histone H4 (mono methyl R3) antibody (ab17339) at 1 µg/ml + HL60 (Human promyelocytic leukemia cell line) Whole Cell Lysate at 10 µg

Secondary

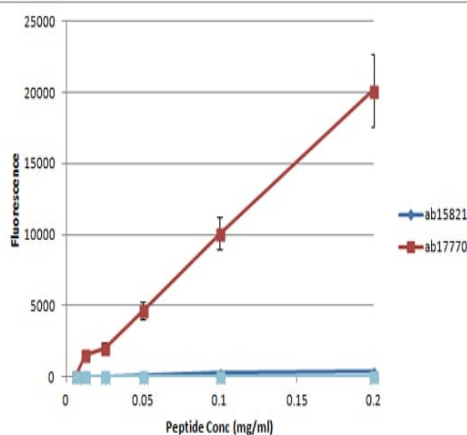
Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/10000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 15 kDa

Observed band size: 14 kDa



Peptide Array - Anti-Histone H4 (mono methyl R3) antibody (ab17339)

All batches of ab17339 are tested in Peptide Array against peptides to different Histone H4 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 H4 - mono methyl R3 peptide ([ab17770](#)), indicating that this antibody specifically recognises the Histone H4 - mono methyl R3 modification.

[ab17770](#) - Histone H4 - mono methyl R3

[ab15821](#) - Histone H4 - unmodified

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

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