# abcam

## Product datasheet

## Anti-Histone H4 (acetyl K12) antibody ab61238

★★★★ 6 Abreviews 22 References 画像数4

#### 製品の概要

製品名 Anti-Histone H4 (acetyl K12) antibody

製品の詳細 Rabbit polyclonal to Histone H4 (acetyl K12)

由来種 Rabbit

アプリケーション 適用あり: ELISA, ICC/IF, IHC-P, WB

種交差性 交差種: Mouse, Human, Drosophila melanogaster, African green monkey

交差が予測される動物種: Rat 4

免疫原 Synthetic peptide corresponding to Human Histone H4 aa 10-15 (acetyl K12). Synthetic

acetylated peptide derived from human Histone H4 around the acetylation site of lysine 12

LGK(Ac)GG

Sequence: LGK(Ac)GG

Database link: P62805

Run BLAST with WB: Extracts from COS7 cells, treated with TSA (400nM, 24hours); KB cells, HEK-293 cells (with

TSA 400nM 24h). IHC-P: Human breast carcinoma tissue

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

ポジティブ・コントロール

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

バッファー pH: 7.40

Preservative: 0.02% Sodium azide

Run BLAST with

Constituents: PBS, 50% Glycerol (glycerin, glycerine), 0.87% Sodium chloride

Without Mg2+ and Ca2+

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** <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab61238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
ELISA		Use at an assay dependent concentration.
ICC/IF	*** <u>*</u>	Use at an assay dependent concentration.
IHC-P	<b>★★★★★ (1)</b>	1/50 - 1/100.
WB	<b>★★★★ ☆ (2)</b>	1/500 - 1/1000. Detects a band of approximately 11 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

翻訳後修飾

Belongs to the histone H4 family.

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 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

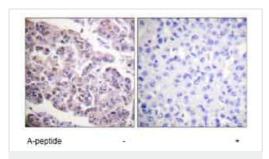
PRDM1/PRMT5 complex may play a crucial role in the germ-cell lineage.

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).

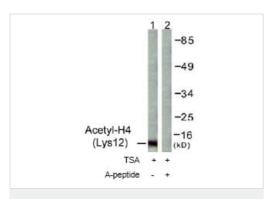
Sumoylated, which is associated with transcriptional repression.

### 画像



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Histone H4 (acetyl K12) antibody (ab61238)

Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue using Histone H4 (acetyl K12) antibody (ab61238) at 1/50 - 1/100 dilution, in the presence (right panel) and absence (left panel) of acetylated peptide.



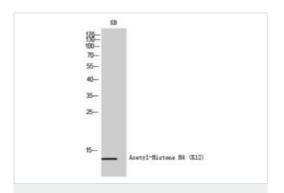
Western blot - Anti-Histone H4 (acetyl K12) antibody (ab61238)

**All lanes :** Anti-Histone H4 (acetyl K12) antibody (ab61238) at 1/500 dilution

Lane 1 : Extracts from COS7 cells, treated with TSA (400nM, 24hours) with no acetylated peptide

Lane 2: Extracts from COS7 cells, treated with TSA (400nM, 24hours) with acetylated peptide

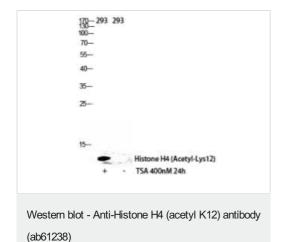
**Predicted band size:** 11 kDa **Observed band size:** 11 kDa



Western blot - Anti-Histone H4 (acetyl K12) antibody (ab61238)

Anti-Histone H4 (acetyl K12) antibody (ab61238) at 1/500 dilution + KB cells

Predicted band size: 11 kDa



**All lanes :** Anti-Histone H4 (acetyl K12) antibody (ab61238) at 1/500 dilution

Lane 1: HEK-293 cells (with TSA 400nM 24h)

Lane 2: HEK-293 cells (without TSA 400nM 24h)

Predicted band size: 11 kDa

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

## Our Abpromise to you: Quality guaranteed and expert technical support

- · Replacement or refund for products not performing as stated on the datasheet
- · Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <a href="https://www.abcam.co.jp/abpromise">https://www.abcam.co.jp/abpromise</a> or contact our technical team.

#### Terms and conditions

• Guarantee only valid for products bought direct from Abcam or one of our authorized distributors