abcam

Product datasheet

Anti-Histone H4 antibody [mAbcam 17036] - ChIP Grade - BSA and Azide free ab174628

★★★★★ 1 Abreviews 2 References 画像数 1

製品	の概	要
----	----	---

製品名	Anti-Histone H4 antibody [mAbcam 17036] - ChIP Grade - BSA and Azide free	
製品の詳細	Mouse monoclonal [mAbcam 17036] to Histone H4 - ChIP Grade – BSA and Azide free	
由来種	Mouse	
アプリケーション	適用あり: IHC-P, ChIP, WB	
種交差性	交差種: Mouse, Rat, Cow, Human	
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	This antibody gave a positive signal in the following: Calf thymus histone preparation; HeLa histone preparation; Histone H4 recombinant protein; NIH3T3 Whole Cell Lysate; MEF1 Whole Cell Lysate; PC12 Whole Cell Lysate.	
特記事項	ab174628 is the carrier-free version of <u>ab17036</u> .	
	This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact orders@abcam.com .	
	Our <u>carrier-free</u> antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.	
	This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.	
	Use our <u>conjugation kits</u> for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.	
	This product is compatible with the Maxpar [®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar [®] is a trademark of Fluidigm Canada Inc.	
	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	

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 Constituent: PBS
キャリア・フリー	はい
精製度	lgG fraction
ポリ/モノ	モノクローナル
クローン名	mAbcam 17036
ミエローマ	Sp2/0-Ag14
アイソタイプ	lgG2a
軽鎖の種類	карра

アプリケーション

The Abpromise guaranteeAbpromise保証は、
次のテスト済みアプリケーションにおけるab174628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
IHC-P		Use a concentration of 1 µg/ml.
ChIP		Use 5 μ g for 25 μ g of chromatin.
WB	★ ★ ★ ★ ☆ <u>(1)</u>	Use a concentration of 1 $\mu\text{g/ml}.$ 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. 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.

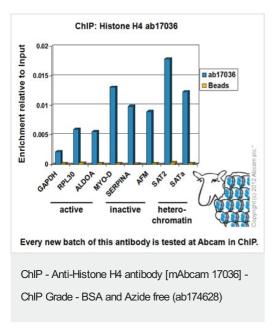
Ubiquitinated by the CUL4-DDB-RBX1 complex in response to ultraviolet irradiation. This may weaken the interaction between histones and DNA and facilitate DNA accessibility to repair proteins. Monoubiquitinated at Lys-92 of histone H4 (H4K91ub1) in response to DNA damage. The exact role of H4K91ub1 in 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.

Nucleus. Chromosome.



画像



This ChIP data was generated using the same antibody clone in a different buffer formulation (<u>ab17036</u>).

Chromatin was prepared from HeLa cells according to the Abcam X-ChIP protocol. Cells were fixed with formaldehyde for 10 minutes. The ChIP was performed with 25µg of chromatin, 5µg of **ab17036** (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 for active and inactive loci, Sybr green approach for heterochromatic loci). Primers and probes are located in the first kb of the transcribed region.

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 <u>https://www.abcam.co.jp/abpromise</u> or contact our technical team.

Terms and conditions

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