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Product datasheet

Anti-HDAC4 antibody ab12172

★★★★☆ **7 Abreviews**   **26 References**   **画像数** 4

製品の概要

製品名	Anti-HDAC4 antibody
製品の詳細	Rabbit polyclonal to HDAC4
由来種	Rabbit
アプリケーション	**適用あり:** ICC/IF, WB, IP
種交差性	**交差種:** Mouse, Rat, Human
	交差が予測される動物種: Rabbit, Chicken ⚠
免疫原	Synthetic peptide:

MSSQSHPDGLSGRDQPVEL

, corresponding to amino acids 1-19 of Human HDAC4 conjugated to KLH with C-terminal added lysine. The corresponding sequence is identical in mouse and chicken.

🖷 **Run BLAST with**   🖷 **Run BLAST with**

ポジティブ・コントロール	WB: NIH/3T3 whole cell extract, Rat brain cell extract. IP: HeLa whole cell extract. ICC/IF: HeLa tissue.
特記事項	Storage in frost-free freezers is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use

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. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
バッファー	pH: 7.40 Preservative: 0.097% Sodium azide Constituents: 0.0268% PBS, 1% BSA

精製度	Immunogen affinity purified
特記事項（精製）	The antibody is affinity-purified using the immunizing peptide immobilized on agarose.
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ab12172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。

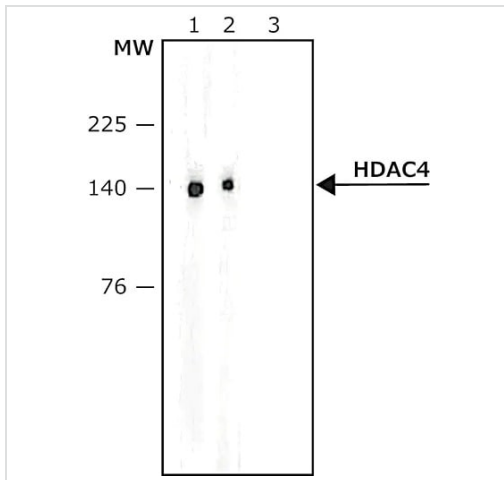| アプリケーション	Abreviews	特記事項
ICC/IF	★★★☆☆ (1)	1/250 - 1/500.
WB	★★★★★ (5)	1/500 - 1/2000. Predicted molecular weight: 119 kDa. Additional weak bands may be detected when blotting using different extract preparations.
IP		Use at an assay dependent concentration. 10-20 µg of antibody immunoprecipitates HDAC4 from a RIPA extract of HeLa nuclei from 1×10^7 cells.

ターゲット情報

機能	Responsible for the deacetylation of lysine residues on the N-terminal part of the core histones (H2A, H2B, H3 and H4). Histone deacetylation gives a tag for epigenetic repression and plays an important role in transcriptional regulation, cell cycle progression and developmental events. Histone deacetylases act via the formation of large multiprotein complexes. Involved in muscle maturation via its interaction with the myocyte enhancer factors such as MEF2A, MEF2C and MEF2D.
組織特異性	Ubiquitous.
関連疾患	Defects in HDAC4 are the cause of brachydactyly-mental retardation syndrome (BDMR) [MIM:600430]. A syndrome resembling the physical anomalies found in Albright hereditary osteodystrophy. Common features are mild facial dysmorphism, congenital heart defects, distinct brachydactyly type E, mental retardation, developmental delay, seizures, autism spectrum disorder, and stocky build. Soft tissue ossification is absent, and there are no abnormalities in parathyroid hormone or calcium metabolism.
配列類似性	Belongs to the histone deacetylase family. HD type 2 subfamily.
ドメイン	The nuclear export sequence mediates the shuttling between the nucleus and the cytoplasm.
翻訳後修飾	Phosphorylated by CaMK4 at Ser-246, Ser-467 and Ser-632. Phosphorylation at other residues is required for the interaction with 14-3-3. Sumoylation on Lys-559 is promoted by the E3 SUMO-protein ligase RANBP2, and prevented by phosphorylation by CaMK4.
細胞内局在	Nucleus. Cytoplasm. Shuttles between the nucleus and the cytoplasm. Upon muscle cells differentiation, it accumulates in the nuclei of myotubes, suggesting a positive role of nuclear HDAC4 in muscle differentiation. The export to cytoplasm depends on the interaction with a 14-3-

3 chaperone protein and is due to its phosphorylation at Ser-246, Ser-467 and Ser-632 by CaMK4. The nuclear localization probably depends on sumoylation.
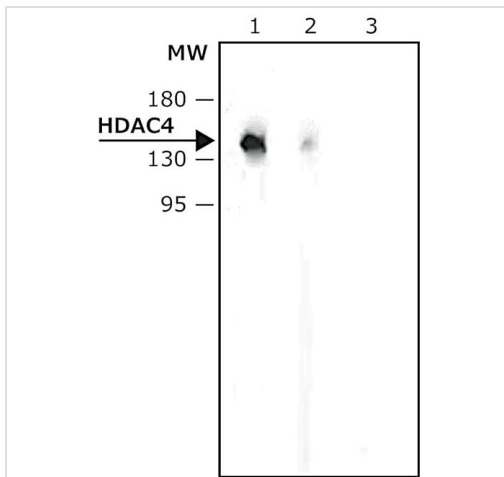
画像

Western blot - Anti-HDAC4 antibody (ab12172)

Lane 1 : Anti-HDAC4 antibody (ab12172) at 1/500 dilution

Lane 2 : Anti-HDAC4 antibody (ab12172) at 1/1000 dilution

Lanes 1-2 : Rat brain whole extract

Lane 3 : Negative control

Predicted band size: 119 kDa

Western blot - Anti-HDAC4 antibody (ab12172)
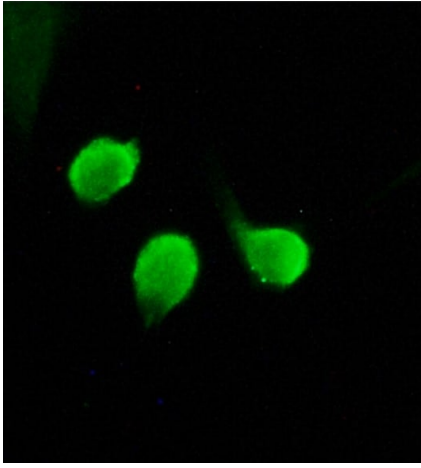
Lane 1 : Anti-HDAC4 antibody (ab12172) at 1/1000 dilution

Lane 2 : Anti-HDAC4 antibody (ab12172) at 1/2000 dilution

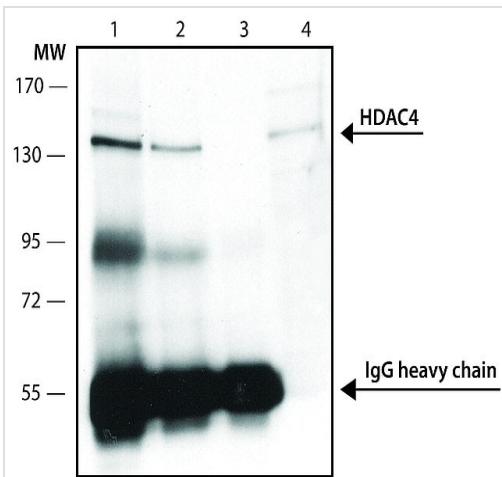**Lanes 1-2 :** NIH/3T3 (Mouse embryonic fibroblast cell line) whole cell extract

Lane 3 : Negative Control

Predicted band size: 119 kDa

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Hela tissue labelling HDAC4 with ab12172 at 1/250 dilution.

Immunocytochemistry/ Immunofluorescence - Anti-HDAC4 antibody (ab12172)

Anti-HDAC4 antibody, ab12172, was used to immunoprecipitate HDAC4 from HeLa whole cell extract.

Lane 1: 10 µg of ab12172

Lane 2: 5 µg of ab12172

Negative control: No cell extract

Positive control: HeLa whole cell extract

Immunoprecipitation - Anti-HDAC4 antibody (ab12172)

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