abcam

Product datasheet

Anti-HDAC4 antibody ab16339

1 References 画像数 2

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: IHC-P, WB

種交差性 交差種: Human

免疫原 Synthetic peptide corresponding to Human HDAC4 aa 1-18.

Sequence:

MSSQSHPDGLSGRDQPVE

Run BLAST with
Run BLAST with

ポジティブ・コントロール

WB: HeLa cell lysate. IHC-P: Human skin 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

製品の状態 Liquid

保存方法 Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

ארע"א Preservative: 0.05% Sodium azide

Constituents: PBS, 0.1% BSA

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

1

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ab16339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		1/20.
WB		1/1000. Predicted molecular weight: 140 kDa.

ターゲット情報

7486	-
ACE	22

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.

 $Sum oylation \ on \ Lys-559 \ is \ promoted \ by \ the \ E3 \ SUMO-protein \ ligase \ RANBP2, \ and \ prevented \ by$

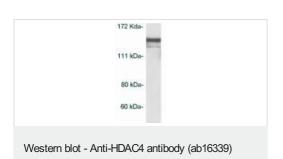
phosphorylation by CaMK4.

細胞内局在

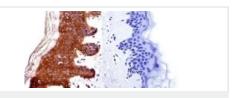
Nucleus. Cytoplasm. Shuttles between the nucleus and the cytoplasm. Upon muscle cells differentiation, it accumulates in the nuclei of myotubes, suggesting a positive role of nuclear HDAC4 in muscle differentiation. The export to cytoplasm depends on the interaction with a 14-3-3 chaperone protein and is due to its phosphorylation at Ser-246, Ser-467 and Ser-632 by

CaMK4. The nuclear localization probably depends on sumoylation.

画像



ab16339 at 1/1000 detecting HDAC4 from HeLa cell lysate by Western blot



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-HDAC4 antibody (ab16339)

Immunohistochemistry was performed on normal biopsies of deparaffinized Human skin tissue. To expose target proteins, heat induced antigen retrieval was performed using 10mM sodium citrate (pH6.0) buffer, microwaved for 8-15 minutes. Following antigen retrieval tissues were blocked in 3% BSA-PBS for 30 minutes at room temperature. Tissues were then probed at a dilution of 1:20 with a Rabbit Polyclonal Antibody recognizing HDAC4 (ab16339) or without primary antibody (negative control) overnight at 4°C in a humidified chamber. Tissues were washed extensively with PBST and endogenous peroxidase activity was quenched with a peroxidase suppressor. Detection was performed using a biotin-conjugated secondary antibody and SA-HRP, followed by colorimetric detection using DAB. Tissues were counterstained with hematoxylin and prepped for mounting.

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