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Product datasheet

Anti-HDAC4 antibody ab16339

1 References 2 图像

概述

产品名称	Anti-HDAC4抗体
描述	**兔多克隆抗体**to HDAC4
宿主	Rabbit
经测试应用	**适用于:** IHC-P, WB
种属反应性	**与反应:** Human
免疫原	Synthetic peptide corresponding to Human HDAC4 aa 1-18. Sequence: MSSQSHPDGLSGRDQPVE Run BLAST with Run BLAST with
阳性对照	WB: HeLa cell lysate. IHC-P: Human skin tissue.
常规说明	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

性能

形式	Liquid
存放说明	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
存储溶液	Preservative: 0.05% Sodium azide Constituents: PBS, 0.1% BSA
纯度	Immunogen affinity purified
克隆	**多克隆**
同种型	IgG

应用

The Abpromise guarantee **Abpromise™承诺保证使用ab16339于以下的经测试应用**

"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
IHC-P		1/20.
WB		1/1000. Predicted molecular weight: 140 kDa.

靶标

功能 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.

组织特异性 Ubiquitous.

疾病相关 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.

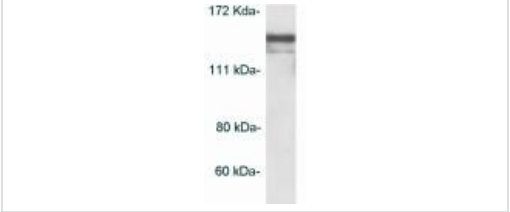
序列相似性 Belongs to the histone deacetylase family. HD type 2 subfamily.

结构域 The nuclear export sequence mediates the shuttling between the nucleus and the cytoplasm.

翻译后修饰 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.

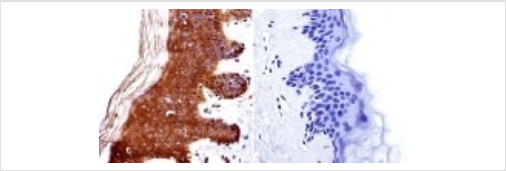
细胞定位 Nucleus. Cytoplasm. Shuttles between the nucleus and the cytoplasm. Upon muscle cells differentiation, it accumulates in the nuclei of myotubes, suggesting a positive role of nuclear HDAC4 in muscle differentiation. The export to cytoplasm depends on the interaction with a 14-3-3 chaperone protein and is due to its phosphorylation at Ser-246, Ser-467 and Ser-632 by CaMK4. The nuclear localization probably depends on sumoylation.

图片



Western blot - Anti-HDAC4 antibody (ab16339)

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



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded 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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