

# Anti-HDAC4 antibody ab123513

## 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: WB, IP
种属反应性	与反应: Human 预测可用于: Chimpanzee, Gorilla, Orangutan 
免疫原	Synthetic peptide corresponding to a region between residue 500 and 550 of Human HDAC4 (NP_006028.2)
阳性对照	HeLa, 293T, Jurkat whole cell lysate
常规说明	<p>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.</p> <p>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&amp;As</p>

### 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	pH: 7 Preservative: 0.09% Sodium azide Constituent: 99% Tris citrate/phosphate
纯度	pH: 7-8 Immunogen affinity purified
克隆	多克隆
同种型	IgG

## 应用

**The Abpromise guarantee**      **Abpromise™**承诺保证使用ab123513于以下的经测试应用

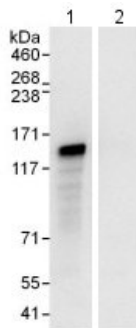
“应用说明”部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB		1/2000 - 1/10000. Predicted molecular weight: 119 kDa.
IP		Use at 2-10 µg/mg of lysate.

## 靶标

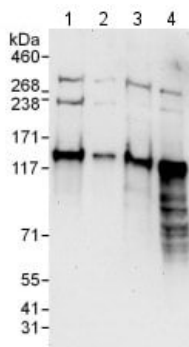
<b>功能</b>	Responsible for the deacetylation of lysine residues on the N-terminal part of the core histones (H2A, H2B, H3 and H4). Histone deacetylation gives a tag for epigenetic repression and plays an important role in transcriptional regulation, cell cycle progression and developmental events. Histone 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.
<b>组织特异性</b>	Ubiquitous.
<b>疾病相关</b>	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.
<b>序列相似性</b>	Belongs to the histone deacetylase family. HD type 2 subfamily.
<b>结构域</b>	The nuclear export sequence mediates the shuttling between the nucleus and the cytoplasm.
<b>翻译后修饰</b>	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.
<b>细胞定位</b>	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



Immunoprecipitation - Anti-HDAC4 antibody  
(ab123513)

Detection of HDAC4 in Immunoprecipitates of HeLa whole cell lysates (1 mg for IP, 20% of IP loaded) using ab123513 at 6 µg/mg lysate for IP (Lane 1) and at 1 µg/ml for subsequent Western blot detection. Lane 2 represents control IgG IP. Detection: Chemiluminescence with an exposure time of 3 seconds.



Western blot - Anti-HDAC4 antibody (ab123513)

**All lanes :** Anti-HDAC4 antibody (ab123513) at 0.1 µg/ml

**Lane 1 :** HeLa whole cell lysate at 50 µg

**Lane 2 :** HeLa whole cell lysate at 15 µg

**Lane 3 :** 293T whole cell lysate at 50 µg

**Lane 4 :** Jurkat whole cell lysate at 50 µg

Developed using the ECL technique.

**Predicted band size:** 119 kDa

**Exposure time:** 30 seconds

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

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