abcam

Product datasheet

Recombinant human HDAC1 protein ab104121

2 图像

描述

产品名称 重组人HDAC1蛋白

生物活性 Specific Activity: 460 pmol/min/μg.

纯**度** > 50 % SDS-PAGE.

Affinity purified.

表达系统 Baculovirus infected insect cells

Accession <u>HDAC1</u>

蛋白长度 Full length protein

无动物成分 No

性质 Recombinant

 种属
 Human

 预测分子量
 56 kDa

 氨基酸
 1 to 482

标签 His tag C-Terminus, DDDDK tag C-Terminus

技术指标

Our **Abpromise guarantee** covers the use of **ab104121** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

应**用** SDS-PAGE

Functional Studies

形式 Liquid

制备和贮存

稳定性和存储 Shipped on Dry Ice. Upon delivery aliquot. Store at -80°C. Avoid freeze / thaw cycle.

pH: 8.00

Constituents: 0.395% Tris HCl, 0.05% Tween, 10% Glycerol (glycerin, glycerine), 0.754% Sodium

chloride

This product is an active protein and may elicit a biological response in vivo, handle with caution.

常规信息

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. Deacetylates SP proteins, SP1 and SP3, and regulates their function. Component of the BRG1-RB1-HDAC1 complex, which negatively regulates the CREST-mediated transcription in resting neurons. Upon calcium stimulation, HDAC1 is released from the complex and CREBBP is recruited, which facilitates transcriptional activation. Deacetylates TSHZ3 and regulates its transcriptional repressor activity. Deacetylates 'Lys-310' in RELA and thereby inhibits the transcriptional activity of NF-kappa-B.

组织特异性

Ubiquitous, with higher levels in heart, pancreas and testis, and lower levels in kidney and brain.

序列相似性

Belongs to the histone deacetylase family. HD type 1 subfamily.

翻译后修饰

Sumoylated on Lys-444 and Lys-476; which promotes enzymatic activity. Desumoylated by

SENP1.

Phosphorylation on Ser-421 and Ser-423 promotes enzymatic activity and interactions with NuRD

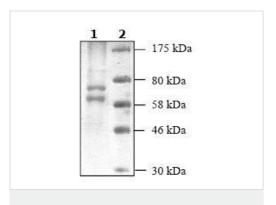
and SIN3 complexes.

Ubiquitinated by CHFR, leading to its degradation by the proteasome.

细胞定位

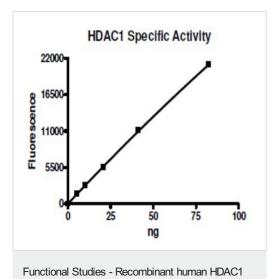
Nucleus.

图片



SDS-PAGE - Recombinant human HDAC1 protein (ab104121)

10% SDS-PAGE showing ab104121 at approximately 56kDa (1µg).



HDAC1 specific activity. HDAC reaction was carried out for 30 minutes at 37°C in a solution containing 25 mM Tris/HCI, pH 8.0, 137 mM NaCl, 2.7 mM KCl, 1 mM MgCl₂, 0.1 mg/ml BSA, 20 μ M Fluorogenic HDAC substrate, and varying amounts of HDAC1 from 0-80 ng. This was followed by treatment with 50 μ L of HDAC developer for 15 minutes at room temperature. Fluorescence intensity is measured at ex360/em460.

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

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protein (ab104121)

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