# abcam

## Product datasheet

# Recombinant human HDAC5 protein ab80348

### 画像数 2

#### 製品の詳細

製品名 Recombinant human HDAC5 protein

**生理活性** Specific Activity: ≥2500 pmol/min/µg.

Unit Definition: One U =1 pmol of acetyl group removed/min/ $\mu$ g of enzyme.

Assay Conditions:

25 mM Tris HCl, pH 8.0, 137 mM NaCl, 2.7 mM KCl, 1 mM MgCl $_2$ , and 0.1 mg/ml BSA, 20  $\mu$ M substrate, and 0.8-50 ng/ $\mu$ l HDAC5. Incubation condition: 30 min at 37°C followed by HDAC developer for 15 min at room temperature. Fluorescence intensity is measured at ex360/em460.

精製度 > 80 % SDS-PAGE.

Affinity purified.

**発現系** Baculovirus infected insect cells

アクセッション番号 Q9UQL6

タンパク質長 Full length protein

Animal free No

由来 Recombinant

**生物種** Human 領域 1 to 1122

タグ GST tag N-Terminus

#### 特性

Our **Abpromise guarantee** covers the use of **ab80348** in the following tested applications.

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

アプリケーション Functional Studies

SDS-PAGE

製品の状態 Liquid

#### 前処理および保存

保存方法および安定性 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), 0.8004% Sodium chloride

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

#### 関連情報

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 by repressing transcription of myocyte enhancer MEF2C. During muscle

differentiation, it shuttles into the cytoplasm, allowing the expression of myocyte enhancer factors.

組織特異性 Ubiquitous.

**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 CaMK at Ser-259 and Ser-498. The phosphorylation is required for the export

to the cytoplasm. Phosphorylated by the PKC kinases PKN1 and PKN2, impairing nuclear import.

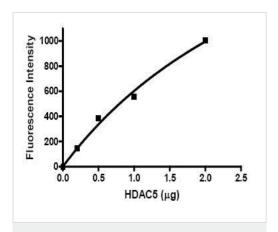
Ubiquitinated. Polyubiquitination however does not lead to its degradation.

細胞内局在 Nucleus. Cytoplasm. Shuttles between the nucleus and the cytoplasm. In muscle cells, it shuttles

into the cytoplasm during myocyte differentiation. The export to cytoplasm depends on the interaction with a 14-3-3 chaperone protein and is due to its phosphorylation at Ser-259 and Ser-

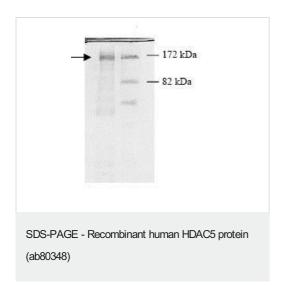
498 by CaMK.

#### 画像



Functional Studies - Recombinant human HDAC5 protein (ab80348)

Image showing specific activity of ab80348.



10% SDS-PAGE showing ab80348 at approximately 150kDa ( $7\mu g$ ).

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

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