

## Product datasheet

# HDAC4 overexpression 293T lysate (whole cell) ab94172

2 Images

### Overview

---

<b>Product name</b>	HDAC4 overexpression 293T lysate (whole cell)
<b>General notes</b>	ab94172 is a 293T cell transfected lysate in which Human HDAC4 has been transiently over-expressed using a pCMV-HDAC4 plasmid. The lysate is provided in 1X Sample Buffer.
<b>Tested applications</b>	<b>Suitable for:</b> WB

### Properties

---

<b>Mycoplasma free</b>	Yes
<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped on dry ice. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
<b>Storage buffer</b>	Constituents: 0.01% Bromophenol blue, 2.3% Beta mercaptoethanol, 2% Sodium lauryl sulfate, 0.788% Tris HCl, 10% Glycerol (glycerin, glycerine)
<b>Background</b>	<p>Disease: 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. Domain: The nuclear export sequence mediates the shuttling between the nucleus and the cytoplasm. Function: 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. PTM: 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. Similarity: Belongs to the histone deacetylase family. HD type 2 subfamily. Tissue specificity: Ubiquitous.</p>

### Applications

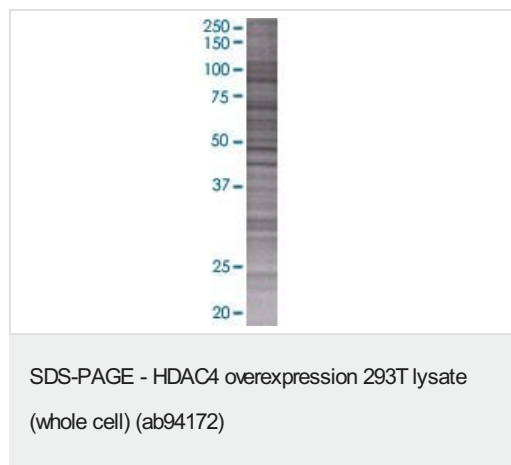
---

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab94172 in the following tested applications.

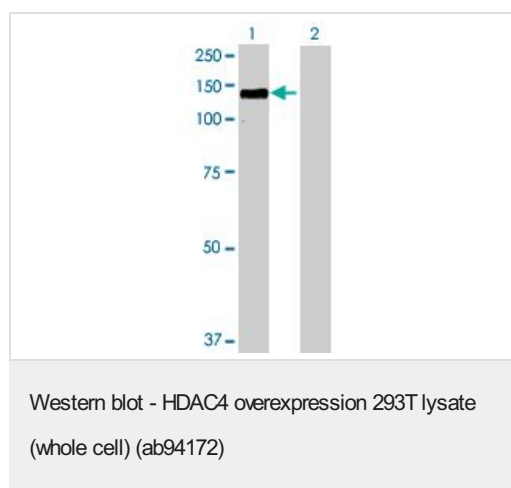
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use at an assay dependent dilution.

## Images



ab94172 at 15µg/lane on an SDS-PAGE gel.



**All lanes :** Anti-HDAC4 antibody ([ab76884](#)) at 1/500 dilution

**Lane 1 :** HDAC4 overexpression 293T lysate (whole cell) (ab94172)

**Lane 2 :** 293T non-transfected lysate

Lysates/proteins at 25 µg per lane.

### Secondary

**All lanes :** Goat Anti-mouse IgG (H and L) HRP conjugated at 1/2500 dilution

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

## Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise,

please visit <https://www.abcam.com/abpromise> or contact our technical team.

## **Terms and conditions**

---

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors