abcam

Product datasheet

Anti-HDAC7 antibody [HDAC7-97] ab50212

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Overview

Product name Anti-HDAC7 antibody [HDAC7-97]

Description Mouse monoclonal [HDAC7-97] to HDAC7

Host species Mouse

Tested applications Suitable for: WB

Species reactivity Reacts with: Human

Predicted to work with: Rat

Immunogen Synthetic peptide:

YRTLEPLDTEGAARSVLSS

conjugated to KLH, corresponding to amino acids 137-155 of Mouse HDAC7

Run BLAST with
Run BLAST with

Positive control WB: human embryonal kidney 293T cells expressing recombinant human HDAC7.

General notesThe 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

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

Storage buffer pH: 7.40

Preservative: 0.097% Sodium azide

Constituent: 0.0268% PBS

Purification notes Ab50212 is a purified lgG.

ClonalityMonoclonalClone numberHDAC7-97

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Myeloma NS1

lsotype lgG1

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab50212 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	★★ ☆☆☆ (1)	Use a concentration of 0.25 - 0.5 μg/ml. Predicted molecular weight: 103 kDa.

Target

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 by repressing transcription of myocyte enhancer factors such as MEF2A, MEF2B and MEF2C. During muscle differentiation, it shuttles into the cytoplasm, allowing the expression of myocyte enhancer factors (By similarity). May be involved in Epstein-Barr virus (EBV) latency, possibly by repressing the viral BZLF1 gene.

Sequence similarities

Belongs to the histone deacetylase family. HD type 2 subfamily.

Domain

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

Post-translational modifications

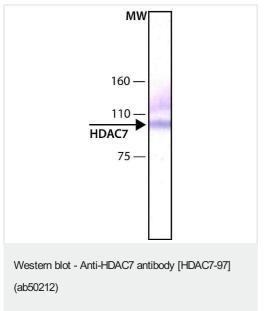
May be phosphorylated by CaMK1. Phosphorylated by the PKC kinases PKN1 and PKN2,

impairing nuclear import.

Cellular localization

Nucleus. Cytoplasm. In the nucleus, it associates with distinct subnuclear dot-like structures. Shuttles between the nucleus and the cytoplasm. Treatment with EDN1 results in shuttling from the nucleus to the perinuclear region. The export to cytoplasm depends on the interaction with the 14-3-3 protein YWHAE and may be due to its phosphorylation.

Images



Anti-HDAC7 antibody [HDAC7-97] (ab50212) at $0.25 \mu g/ml + embryonal kidney 293T cells$

Predicted band size: 103 kDa

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

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