



Anti-HDAC5 antibody [HDAC5-35] ab50001

[2 References](#) [1 Image](#)

Overview

| | |
|----------------------------|---|
| Product name | Anti-HDAC5 antibody [HDAC5-35] |
| Description | Mouse monoclonal [HDAC5-35] to HDAC5 |
| Host species | Mouse |
| Tested applications | Suitable for: WB |
| Species reactivity | Reacts with: Mouse |
| Immunogen | <p>Synthetic peptide corresponding to Human HDAC5 aa 4-19 conjugated to keyhole limpet haemocyanin. synthetic peptide has a C-terminal added lysine.</p> <p>Sequence:</p> <p>PNESDGMSGREPSLEI</p> <p>Database link: Q9UQL6</p> <p> Run BLAST with  Run BLAST with</p> |
| Positive control | WB: Total cell extracts of NIH3T3 fibroblast cells. |
| General notes | <p>This product was changed from ascites to tissue culture supernatant on 05/06/2019. Please note that the dilutions may need to be adjusted accordingly. If you have any questions, please do not hesitate to contact our scientific support team.</p> <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&As</p> |

Properties

| | |
|-----------------------------|--|
| Form | Liquid |
| Storage instructions | Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles. |
| Storage buffer | <p>pH: 7.40</p> <p>Preservative: 0.097% Sodium azide</p> <p>Constituent: 0.0268% PBS</p> |

| | |
|---------------------|----------------------------|
| Purity | Tissue culture supernatant |
| Clonality | Monoclonal |
| Clone number | HDAC5-35 |
| Myeloma | NS1 |
| Isotype | IgG1 |

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab50001 in the following tested applications.

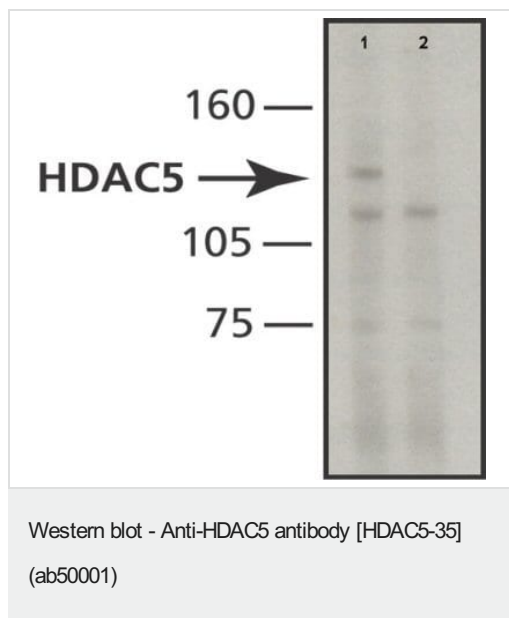
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

| Application | Abreviews | Notes |
|-------------|-----------|---|
| WB | | Use at an assay dependent concentration. Predicted molecular weight: 122 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 MEF2C. During muscle differentiation, it shuttles into the cytoplasm, allowing the expression of myocyte enhancer factors. |
| Tissue specificity | Ubiquitous. |
| 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 | 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. |
| Cellular localization | 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. |

Images



Lane 1 : Anti-HDAC5 antibody [HDAC5-35] (ab50001) at 2 µg/ml

Lane 2 : no primary antibody

All lanes : 3T3 cell extract (mouse fibroblasts)

Secondary

All lanes : Goat Anti-Mouse, Peroxidase conjugate

Predicted band size: 122 kDa

Observed band size: ~122 kDa

This image was generated using the ascites version of the product.

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

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