

Product datasheet

Anti-HDAC5 antibody ab55403

★★★★☆ [4 Abreviews](#) [15 References](#) [2 Images](#)

Overview

Product name	Anti-HDAC5 antibody
Description	Rabbit polyclonal to HDAC5
Host species	Rabbit
Tested applications	Suitable for: ELISA, ICC/IF, IHC-FoFr, WB, IHC-P
Species reactivity	Reacts with: Mouse, Human
Immunogen	Synthetic peptide corresponding to Human HDAC5. Immunogen range: 225-274. Around Serine 259. Database link: Q9UQL6

General notes

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.

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 -20°C. Stable for 12 months at -20°C.
Storage buffer	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: 50% Glycerol (glycerin, glycerine), 0.87% Sodium chloride, PBS Without Mg ⁺² and Ca ⁺²
Purity	Immunogen affinity purified
Purification notes	ab55403 was affinity purified from rabbit antiserum by affinity chromatography using epitope specific immunogen.
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab55403 in the following tested applications.

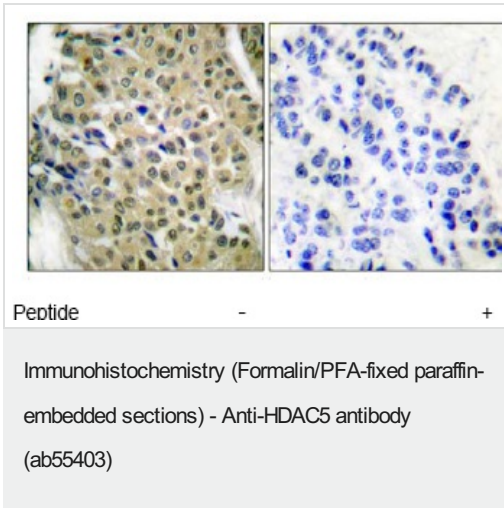
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ELISA		Use at an assay dependent concentration.
ICC/IF		Use at an assay dependent concentration. PubMed: 23469282
IHC-FoFr		Use at an assay dependent concentration. PubMed: 21526203
WB	★ ★ ★ ☆ ☆ (3)	1/500 - 1/1000. Detects a band of approximately 122 kDa (predicted molecular weight: 122 kDa).
IHC-P		Use at an assay dependent concentration.

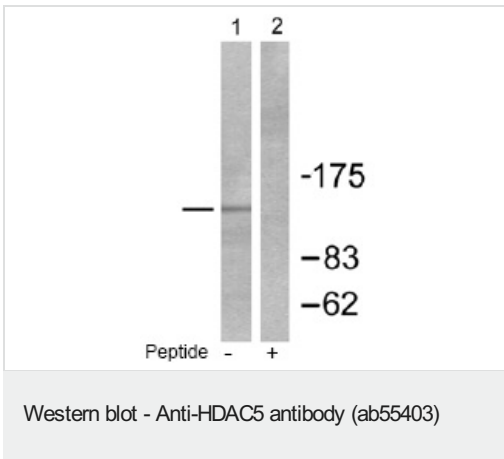
Target

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



Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using ab55403 (1/50 dilution) in the presence and absence of the immunizing peptide.



All lanes : Anti-HDAC5 antibody (ab55403) at 1/500 dilution

Lane 1 : HepG2 cell extract, without immunizing peptide

Lane 2 : HepG2 cell extract, with immunizing peptide

Predicted band size: 122 kDa

Observed band size: 122 kDa

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