

Product datasheet

Anti-HDAC5 antibody ab245409

1 Image

Overview

Product name	Anti-HDAC5 antibody
Description	Rabbit polyclonal to HDAC5
Host species	Rabbit
Tested applications	Suitable for: IP Unsuitable for: WB
Species reactivity	Reacts with: Human Predicted to work with: Orangutan 
Immunogen	Synthetic peptide within Human HDAC5 aa 600-650. The exact sequence is proprietary. NP_005465.2 Database link: Q9UQL6
Positive control	IP: HeLa whole cell lysate.

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 long term. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.09% Sodium azide Constituent: Tris citrate/phosphate pH 7 to 8
Purity	Immunogen affinity purified
Purification notes	ab245409 was affinity purified using an epitope specific to HDAC5 immobilized on solid support.
Clonality	Polyclonal
Isotype	IgG

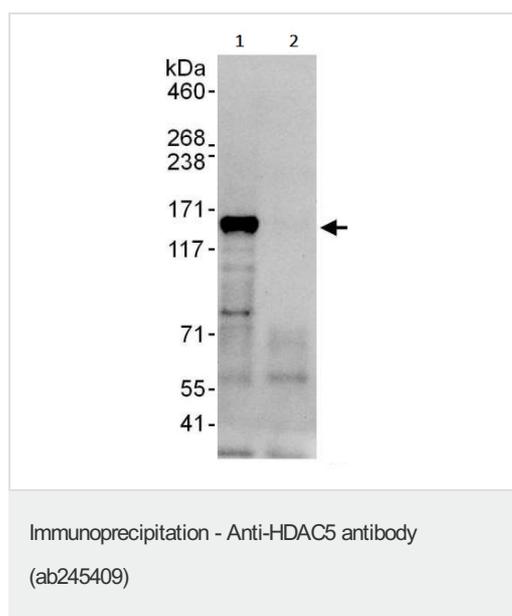
Applications

Our [Abpromise guarantee](#) covers the use of **ab245409** 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
IP		Use at 2-10 µg/mg of lysate.
Application notes	Is unsuitable for WB.	
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



HDAC5 was immunoprecipitated from HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell lysate (1 mg for IP, 20% of IP loaded) with ab245409 at 6 µg/mg lysate. Western blot was performed from the immunoprecipitate using a different Anti-HDAC5 antibody at 0.4 µg/ml.

Lane 1: ab245409 IP in HeLa whole cell lysate.

Lane 2: Control IgG IP in HeLa whole cell lysate.

Detection: Chemiluminescence with exposure time of 30 seconds.

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