abcam

Product datasheet

Anti-HDAC2 (phospho S394) antibody ab75602

★★★★★ 2 Abreviews 7 References 3 Images

Overview

Product name Anti-HDAC2 (phospho S394) antibody

Description Rabbit polyclonal to HDAC2 (phospho S394)

Host species Rabbit

Tested applications Suitable for: ICC/IF, WB, IHC-P

Species reactivity Reacts with: Human

Immunogen Synthetic peptide corresponding to Human HDAC2 (phospho S394).

■ Run BLAST with Expasy
■ Run BLAST with NCBI

Positive control Extracts from HT-29 cells treated with UV (20min). Human breast carcinoma tissue.

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 -20°C. Stable for 12 months at -20°C.

Storage buffer pH: 7.40

Preservative: 0.02% Sodium azide

Constituents: 0.87% Sodium chloride, 50% Glycerol, PBS

Without Mg2+ and Ca2+

Purity Immunogen affinity purified

Purification notes ab75602 was affinity-purified from rabbit antiserum by affinity chromatography using epitope-

specific phosphopeptide. The antibody against non-phosphopeptide was removed by chromatography using non-phosphopeptide corresponding to the phosphorylation site.

Clonality Polyclonal

Isotype IgG

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Applications

The Abpromise guarantee

Our Abpromise guarantee covers the use of ab75602 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
ICC/IF		1/100 - 1/200.
WB	★★★★☆ (1)	1/500 - 1/1000. Predicted molecular weight: 55 kDa.
IHC-P	★★★★☆ (1)	1/50 - 1/100.

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.

Forms transcriptional repressor complexes by associating with MAD, SIN3, YY1 and N-COR. Interacts in the late S-phase of DNA-replication with DNMT1 in the other transcriptional repressor complex composed of DNMT1, DMAP1, PCNA, CAF1. Deacetylates TSHZ3 and regulates its transcriptional repressor activity.

Tissue specificity

Widely expressed; lower levels in brain and lung.

Sequence similarities

Belongs to the histone deacetylase family. HD type 1 subfamily.

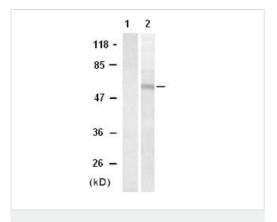
Post-translational modifications

S-nitrosylated by GAPDH. In neurons, S-Nitrosylation at Cys-262 and Cys-274 does not affect the enzyme activity but abolishes chromatin-binding, leading to increases acetylation of histones and activate genes that are associated with neuronal development. In embryonic cortical neurons, S-Nitrosylation regulates dendritic growth and branching.

Cellular localization

Nucleus.

Images



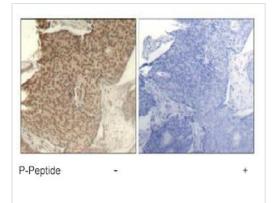
Western blot - Anti-HDAC2 (phospho S394) antibody (ab75602)

All lanes : Anti-HDAC2 (phospho S394) antibody (ab75602) at 1/500 dilution

Lane 1: Extracts from HT-29 cells (untreated)

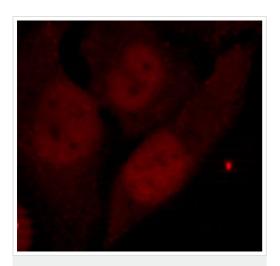
Lane 2: Extracts from HT-29 cells treated with UV (20min)

Predicted band size: 55 kDa **Observed band size:** 55 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-HDAC2 (phospho S394) antibody (ab75602)

Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using ab75602, at 1/50 dilution, in the absence (left panel) and presence (right panel) of the immunising phosphopeptide.



Immunocytochemistry/ Immunofluorescence - Anti-HDAC2 (phospho S394) antibody (ab75602)

ab75602 at 1/100 dilution, staining HDAC2 (phospho S394) in human Hela cells by ICC/IF.

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

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