# abcam

### Product datasheet

# Alexa Fluor® 488 Anti-HDAC2 antibody [3F3] ab208120

### 1 Image

#### Overview

**Product name** Alexa Fluor® 488 Anti-HDAC2 antibody [3F3]

**Description** Alexa Fluor® 488 Mouse monoclonal [3F3] to HDAC2

**Host species** Mouse

Conjugation Alexa Fluor® 488. Ex: 495nm, Em: 519nm

**Tested applications** Suitable for: ICC/IF

Species reactivity Reacts with: Human

Predicted to work with: Mouse, Rat, Chicken, Cow

**Immunogen** Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Positive control ICC/IF: HeLa cells

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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

Form Liquid

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

Avoid freeze / thaw cycle. Store In the Dark.

Storage buffer pH: 7.40

Preservative: 0.02% Sodium azide

Constituents: 30% Glycerol (glycerin, glycerine), 1% BSA, PBS

Purity Immunogen affinity purified

**Clonality** Monoclonal

Clone number 3F3
Isotype IgG

#### **Applications**

The Abpromise guarantee Our Abpromise guarantee covers the use of ab208120 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		1/10000. This product gave a positive signal in HeLa cells fixed with 4% formaldehyde (10 min)

### 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	

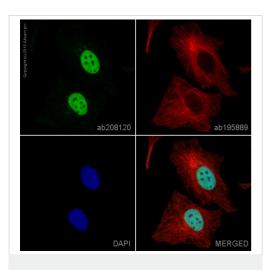
Nitrosylation regulates dendritic growth and branching.

Nucleus.

activate genes that are associated with neuronal development. In embryonic cortical neurons, S-

## Images

**Cellular localization** 



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 488 Anti-HDAC2 antibody [3F3] (ab208120)

ab208120 staining HDAC2 in HeLa cells. The cells were fixed with 4% formaldehyde (10 min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at +4°C with ab208120 at 1/10000 dilution (shown in green) and <a href="mailto:ab195889">ab195889</a>, Mouse monoclonal to alpha Tubulin (Alexa Fluor<sup>®</sup> 594), at 1/250 dilution (shown in red). Nuclear DNA was labelled with DAPI (shown in blue).

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

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