

For Research Use Only

# HDAC2 Polyclonal antibody

Catalog Number: 12922-3-AP

Featured Product

87 Publications



## Basic Information

### Catalog Number:

12922-3-AP

### Size:

150ul, Concentration: 600 ug/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG3607

### GenBank Accession Number:

BC031055

### GeneID (NCBI):

3066

### UNIPROT ID:

Q92769

### Full Name:

histone deacetylase 2

### Calculated MW:

458 aa, 52 kDa; 488 aa, 55 kDa

### Observed MW:

55-60 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:5000-1:50000

IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC 1:2000-1:8000

IF/ICC 1:1000-1:4000

## Applications

### Tested Applications:

WB, IHC, IF/ICC, IP, ELISA

### Cited Applications:

WB, IHC, IF, IP, CoIP, ChIP

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rat

### Positive Controls:

**WB** : HEK-293 cells, human kidney tissue, MCF-7 cells, rat liver tissue, HeLa cells, HepG2 cells, L02 cells, C6 cells, NIH/3T3 cells, rat kidney tissue

**IP** : HEK-293 cells,

**IHC** : mouse brain tissue,

**IF/ICC** : HepG2 cells, HeLa cells

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

## Background Information

Histone deacetylases (HDAC) are a class of enzymes that remove the acetyl groups from the lysine residues leading to the formation of a condensed and transcriptionally silenced chromatin. Histone deacetylases act via the formation of large multiprotein complexes, and are responsible for the deacetylation of lysine residues at the N-terminal regions of core histones (H2A, H2B, H3 and H4). At least 4 classes of HDAC were identified. As a class I HDAC, HDAC2 was primarily found in the nucleus. HDAC2 forms transcriptional repressor complexes by associating with many different proteins, including YY1, a mammalian zinc-finger transcription factor. Thus, it plays an important role in transcriptional regulation, cell cycle progression and developmental events. This antibody is a rabbit polyclonal antibody raised against residues near the C terminus of human HDAC2.

## Notable Publications

Author	Pubmed ID	Journal	Application
Hong Mai	34586697	J Cell Mol Med	IHC
Daniel B McClatchy	32994440	Sci Rep	WB
Z Li	26411366	Oncogene	WB

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

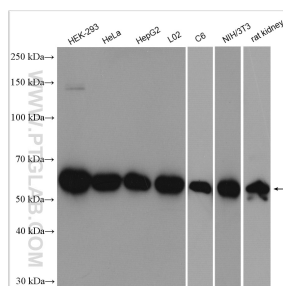
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

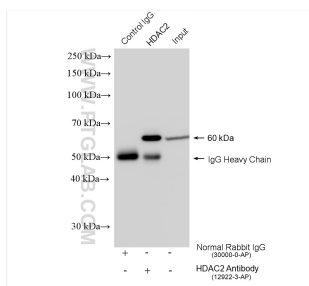
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

## Selected Validation Data



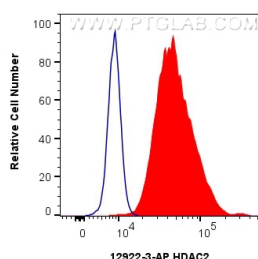
Various lysates were subjected to SDS PAGE followed by western blot with 12922-3-AP (HDAC2 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



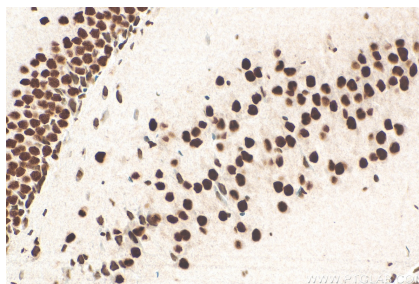
IP result of anti-HDAC2 (IP:12922-3-AP, 4ug; Detection:12922-3-AP 1:20000) with HEK-293 cells lysate 960 ug.



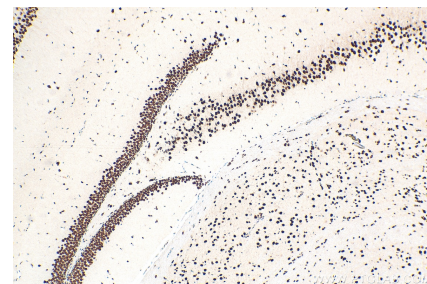
Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using HDAC2 antibody (12922-3-AP) at dilution of 1:2000 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red).



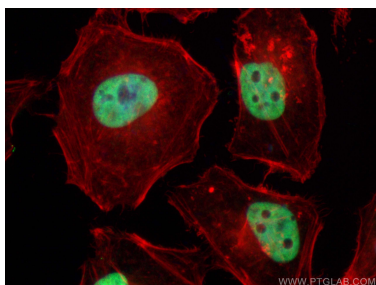
1x10<sup>6</sup> HeLa cells were intracellularly stained with 0.25 ug HDAC2 Polyclonal antibody (12922-3-AP) and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.25 ug Isotype Control (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 12922-3-AP (HDAC2 antibody) at dilution of 1:4000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 12922-3-AP (HDAC2 antibody) at dilution of 1:4000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using HDAC2 antibody (12922-3-AP) at dilution of 1:1000 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-phalloidin (red).