

For Research Use Only

# HDAC5-specific Polyclonal antibody

Catalog Number: 16166-1-AP

Featured Product

28 Publications



## Basic Information

### Catalog Number:

16166-1-AP

### Size:

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

### Source:

Rabbit

### Isotype:

IgG

### GenBank Accession Number:

BC051824

### GeneID (NCBI):

10014

### UNIPROT ID:

Q9UQL6

### Full Name:

histone deacetylase 5

### Calculated MW:

122 kDa

### Observed MW:

120-140 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB: 1:100-1:1000

IHC: 1:50-1:500

IF/ICC: 1:50-1:500

## Applications

### Tested Applications:

WB, IHC, IF/ICC, ELISA

### Cited Applications:

WB, IHC, IF, CoIP, ChIP

### Species Specificity:

human, mouse

### Cited Species:

human, mouse, rat

### Positive Controls:

WB: HeLa cells, HEK-293 cells, fetal human brain tissue

IHC: mouse brain tissue, human brain tissue, human heart tissue

IF/ICC: HepG2 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 acetylation and deacetylation alternately expose and occlude DNA to transcription factors. At least 4 classes of HDAC were identified. HDAC5 is a class II HDAC. HDAC5 is 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. HDAC5 is involved in muscle maturation by repressing transcription of myocyte enhancer MEF2C. During muscle differentiation, HDAC5 shuttles into the cytoplasm, allowing the expression of myocyte enhancer factors. This antibody only binds HDAC5. It does not cross-react with other HDACs.

## Notable Publications

Author	Pubmed ID	Journal	Application
Ying Wang	36124413	Folia Histochem Cytobiol	WB, CoIP
Xun Huang	30220457	Cell	WB
Lauren E Chaby	33087769	Sci Rep	WB

## Storage

### Storage:

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

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

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

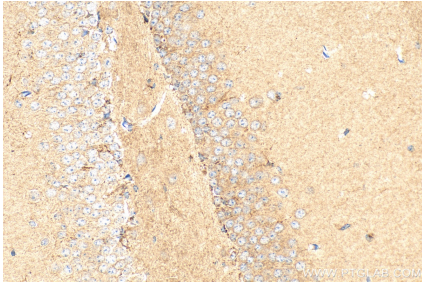
For technical support and original validation data for this product please contact:

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

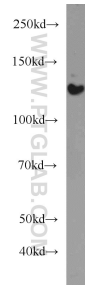
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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

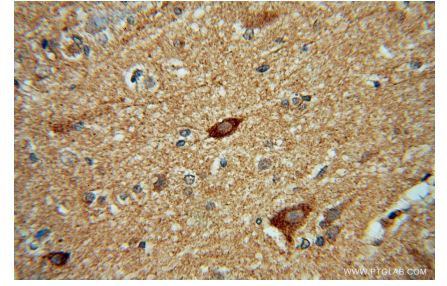
## Selected Validation Data



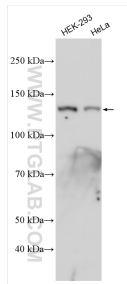
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 16166-1-AP (HDAC5-specific antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



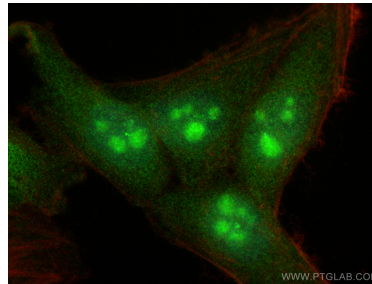
HeLa cells were subjected to SDS PAGE followed by western blot with 16166-1-AP (HDAC5-specific antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human brain using 16166-1-AP (HDAC5-specific antibody) at dilution of 1:50 (under 40x lens).



Various lysates were subjected to SDS PAGE followed by western blot with 16166-1-AP (HDAC5-specific antibody) at dilution of 1:600 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using HDAC5-specific antibody (16166-1-AP) at dilution of 1:200 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red).