

For Research Use Only

HDAC5-specific Polyclonal antibody

Catalog Number: 16166-1-AP

Featured Product

26 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

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

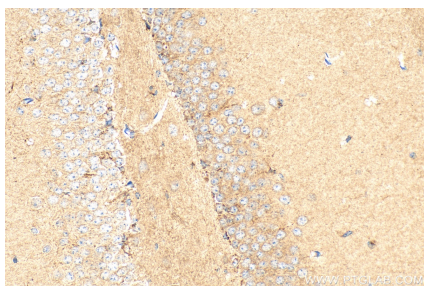
For technical support and original validation data for this product please contact:

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

E: proteintech@ptglab.com
W: ptglab.com

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

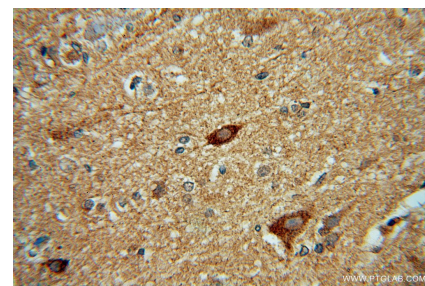
Selected Validation Data



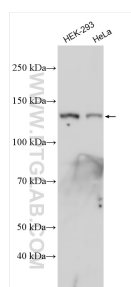
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 16166-1-AP (HDAC5-specific antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



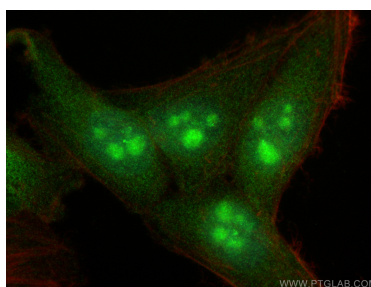
HeLa cells were subjected to SDS PAGE followed by western blot with 16166-1-AP (HDAC5-specific antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



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 Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red).