For Research Use Only

HDAC5-specific Polyclonal antibody

Catalog Number:16166-1-AP Featured Product 20 Publications

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Basic Information

Catalog Number:
16166-1-AP

Size:
600 μg/ml

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 1:50-1:500

Applications

Tested Applications:
IF/ICC, IHC, WB, ELISA

Cited Applications:
CoIP, IF, IHC, WB

Species Specificity:
human, mouse

Cited Species:
human, rat, mouse

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

Positive Controls:

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

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

IF : HeLa cells,

Background Information

Histone acetylation and deacetylation alternately exposes and occludes DNA to transcription factors. At least 4 classes of HDAC were identified. HDAC5 is a class II HDAC. HDAC5 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 pH 7.3.
Aliquoting is unnecessary for -20°C storage

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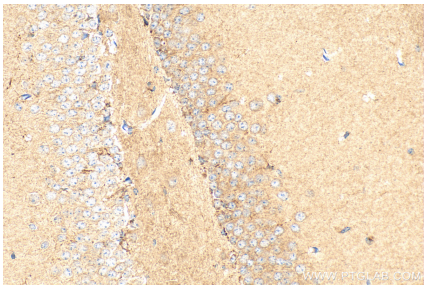
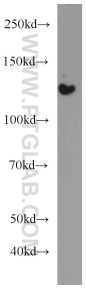
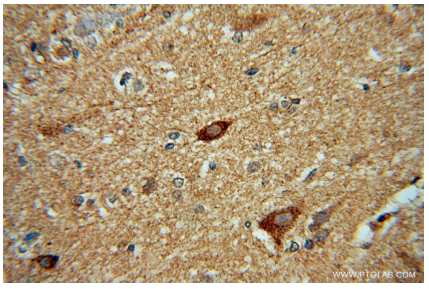
Selected Validation Data



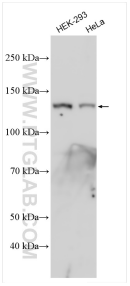
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 16166-1-AP (HDAC5-specific antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



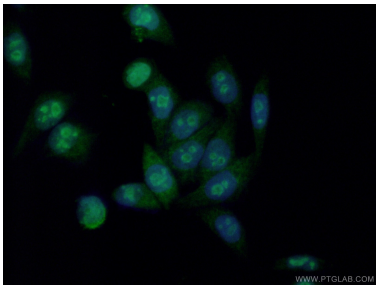
HeLa cells were subjected to SDS PAGE followed by western blot with 16166-1-AP (HDAC5-specific antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



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 HeLa cells using 16166-1-AP (HDAC5-specific antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).