HDAC6 Polyclonal ANTIBODY
Catalog Number: 12834-1-AP

Basic Information
Catalog Number: 12834-1-AP
Size: 60 μg/150 μl
Source: Rabbit
Isotype: IgG
Purification Method: Antigen affinity purification
Immunogen Catalog Number: AG3572

GenBank Accession Number: B0413797
GeneID (NCBI): 10013
Calculated MW: 1063aa, 114 kDa, 131 kDa
Observed MW: 160 kDa

Recommended Dilutions:
WB 1:500-1:2000
IP 0.5-4.0 μg for IP and 1:500-1:2000 for WB
IHC 1:200-1:200
IF 1:50-1:500

Applications
Tested Applications:
IF, IHC, IP, WB, ELISA
Cited Applications:
IHC, WB
Species Specificity:
human, mouse, rat

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: K-562 cells, human liver tissue, HeLa cells, HepG2 cells
IP: K-562 cells
IHC: human testis tissue
IF: HepG2 cells

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. At least 4 classes of HDAC were identified. HDAC6 is a member of the class II mammalian histone deacetylases. It possesses two separate putative catalytic domains. Both catalytic domains are fully functional HDACs and contribute independently to the overall activity of HDAC6 protein. A very potent NES is present at the amino-terminus of HDAC6, which was found to play an important role in regulating the shuttling of HDAC6 protein between cytoplasm and nucleus. The shuttling process may be a critical regulatory mechanism of HDAC6 function. The expression of HDAC6 is tightly linked to the state of cell differentiation. HDAC6 may participate in coordinating expression of a group of genes involved in the remodelling of chromatin during cell differentiation. HDAC6 has some splicing variants such as P114 (~130kd), P131 (~160kd). This antibody is a rabbit polyclonal antibody raised against residues near the C terminal of human HDAC6. The calculated molecular weight of HDAC6 is 130 kDa, but the modified the HDAC6 is about 150-160 kDa.

Notable Publications
<table>
<thead>
<tr>
<th>Author</th>
<th>Pubmed ID</th>
<th>Journal</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zurong Fu</td>
<td>30671937</td>
<td>J Thorac Cardiovasc Surg</td>
<td>WB, IHC</td>
</tr>
<tr>
<td>Jia Liu</td>
<td>31062516</td>
<td>Small</td>
<td>WB</td>
</tr>
<tr>
<td>Di Zhang</td>
<td>30862588</td>
<td>Life Sci</td>
<td>WB, IHC</td>
</tr>
</tbody>
</table>

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:
T 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 405-8498 (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.
K-562 cells were subjected to SDS-PAGE followed by western blot with 12834-1-AP (HDAC6 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours. IP Result of anti-HDAC6 (IP:12834-1-AP 5ug; Detection:12834-1-AP 1:1000) with K-562 cell lysate 11000ug.

Immunohistochemical analysis of paraffin-embedded human testis using 12834-1-AP (HDAC6 antibody) at dilution of 1:50 (under 10x lens). Immunofluorescent analysis of (10% Formaldehyde) fixed HepG2 cells using 12834-1-AP (HDAC6 antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).