

## HDAC6 Monoclonal antibody

Catalog Number: 67250-1-Ig 1 Publications

## Basic Information

<b>Catalog Number:</b> 67250-1-Ig	<b>GenBank Accession Number:</b> BC013737	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 1000 µg/ml	<b>GeneID (NCBI):</b> 10013	<b>CloneNo.:</b> 1C7C3
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> Q9UBN7	<b>Recommended Dilutions:</b> WB 1:5000-1:50000 IHC 1:500-1:2000 IF 1:400-1:1600
<b>Isotype:</b> IgG1	<b>Full Name:</b> histone deacetylase 6	
<b>Immunogen Catalog Number:</b> AG28585	<b>Calculated MW:</b> 1063 aa, 114 kDa, 131 kDa	
	<b>Observed MW:</b> 150-160 kDa	

## Applications

<b>Tested Applications:</b> IF/ICC, IHC, WB, ELISA	<b>Positive Controls:</b>
<b>Cited Applications:</b> IF, WB	<b>WB :</b> HEK-293 cells, HeLa cells, NCI-H1299 cells, MCF-7 cells, HepG2 cells, Jurkat cells, K-562 cells, HL-60 cells, THP-1 cells
<b>Species Specificity:</b> Human	<b>IHC :</b> human lung cancer tissue, human breast cancer tissue
<b>Cited Species:</b> mouse	<b>IF :</b> HepG2 cells, SH-SY5Y cells
<b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b>	

## 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 raised against residues near the C terminal of human HDAC6. The calculated molecular weight of HDAC6 is 130 kDa, but the modified HDAC6 is about 150-160 kDa.

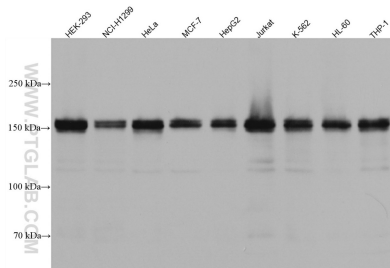
## Notable Publications

Author	Pubmed ID	Journal	Application
Pratibha Verma	36788143	Cell Tissue Res	WB, IF

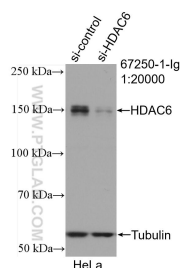
## Storage

**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

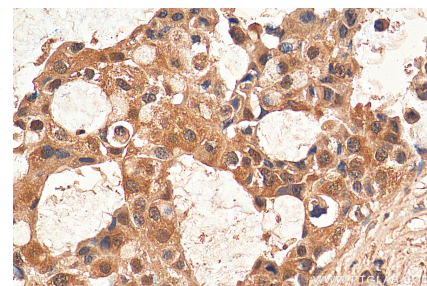
## Selected Validation Data



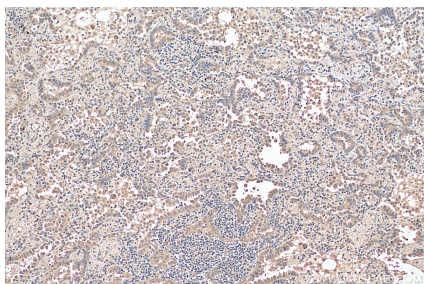
Various lysates were subjected to SDS PAGE followed by western blot with 67250-1-Ig (HDAC6 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



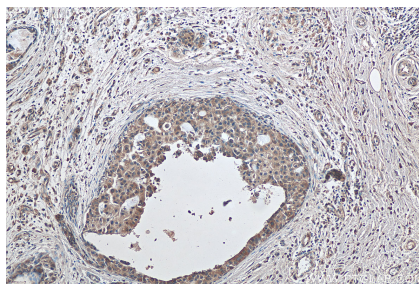
WB result of HDAC6 antibody (67250-1-Ig; 1:20000; incubated at room temperature for 1.5 hours) with sh-Control and sh-HDAC6 transfected HeLa cells.



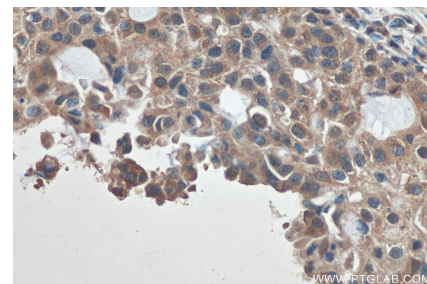
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 67250-1-Ig (HDAC6 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



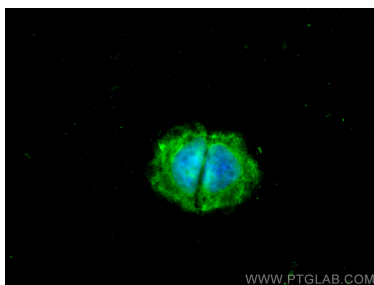
Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 67250-1-Ig (HDAC6 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



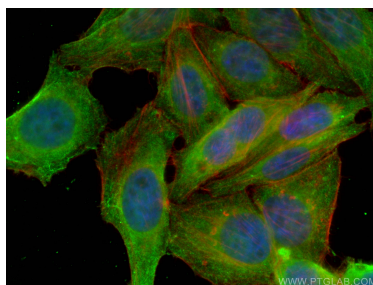
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 67250-1-Ig (HDAC6 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 67250-1-Ig (HDAC6 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed SH-SY5Y cells using HDAC6 antibody (67250-1-Ig, Clone: 1C7C3) at dilution of 1:800 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using HDAC6 antibody (67250-1-Ig, Clone: 1C7C3) at dilution of 1:800 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L), CL594-Phalloidin (red).