

# CoraLite®594-conjugated HDAC6 Monoclonal antibody

Catalog Number: CL594-67250

## Basic Information

## Catalog Number:

CL594-67250

## Source:

Mouse

## Isotype:

IgG1

## Immunogen Catalog Number:

AG28585

## GenBank Accession Number:

BC013737

## GeneID (NCBI):

10013

## UNIPROT ID:

Q9UBN7

## Full Name:

histone deacetylase 6

## Calculated MW:

1063 aa, 114 kDa, 131 kDa

## Observed MW:

150-160 kDa

## Purification Method:

Protein G purification

## CloneNo.:

1C7C3

## Recommended Dilutions:

IF/ICC: 1:50-1:500

FC (Intra): 0.40 ug per 10<sup>6</sup> cells in a 100 µl suspension

## Excitation/Emission maxima wavelengths:

588 nm / 604 nm

## Applications

## Tested Applications:

IF/ICC, FC (Intra)

## Species Specificity:

human

## Positive Controls:

IF/ICC : SH-SY5Y cells,

FC (Intra) : SH-SY5Y 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 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.

## Storage

## Storage:

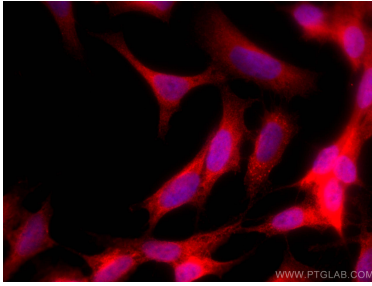
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

## Storage Buffer:

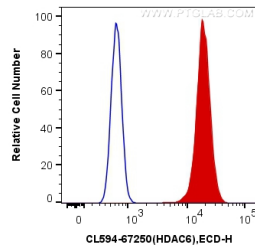
PBS with 50% glycerol, 0.05% Proclin300, 0.5% BSA, pH7.3

Aliquoting is unnecessary for -20°C storage

## Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed SH-SY5Y cells using CoraLite®594 HDAC6 antibody (CL594-67250, Clone: 1C7C3) at dilution of 1:200.



1X10<sup>6</sup> SH-SY5Y cells were intracellularly stained with 0.4 ug CoraLite®594 Anti-Human HDAC6 (CL594-67250, Clone:1C7C3) (red), or 0.4 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer.