

HDAC2 Monoclonal antibody

Catalog Number: 67165-1-Ig

Featured Product

3 Publications

Basic Information

Catalog Number:

67165-1-Ig

Size:

1000 µg/ml

Source:

Mouse

Isotype:

IgG2b

Immunogen Catalog Number:

AG21288

GenBank Accession Number:

BC031055

GeneID (NCBI):

3066

UNIPROT ID:

Q92769

Full Name:

histone deacetylase 2

Calculated MW:

458 aa, 52 kDa; 488 aa, 55 kDa

Observed MW:

55 kDa

Purification Method:

Protein A purification

CloneNo.:

1A3E4

Recommended Dilutions:

WB 1:5000-1:50000

IHC 1:500-1:2000

IF/ICC 1:400-1:1600

Applications

Tested Applications:

WB, IF/ICC, IHC, ELISA, FC (Intra)

Cited Applications:

WB, IP, IF, CoIP

Species Specificity:

Human, mouse, rat

Cited Species:

human, 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: U2OS cells, 4T1 cells, MCF-7 cells, HeLa cells, HEK-293 cells, Jurkat cells, K-562 cells, HSC-T6 cells, NIH/3T3 cells

IHC: human breast cancer tissue,

IF/ICC: 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. Histone deacetylases act via the formation of large multiprotein complexes, and are responsible for the deacetylation of lysine residues at the N-terminal regions of core histones (H2A, H2B, H3 and H4). At least 4 classes of HDAC were identified. As a class I HDAC, HDAC2 was primarily found in the nucleus. HDAC2 forms transcriptional repressor complexes by associating with many different proteins, including YY1, a mammalian zinc-finger transcription factor. Thus, it plays an important role in transcriptional regulation, cell cycle progression and developmental events. This antibody is raised against residues near the C terminus of human HDAC2.

Notable Publications

Author	Pubmed ID	Journal	Application
Tianrong Xun	35753429	Toxicol Appl Pharmacol	WB, IF, IP
Zhilei Zhang	37867947	iScience	WB, CoIP
Xintian Lan	37764423	Molecules	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

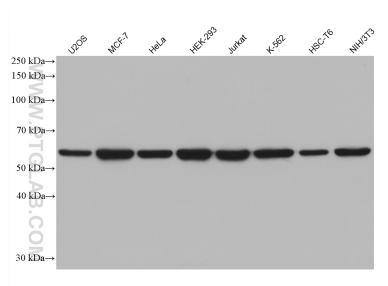
For technical support and original validation data for this product please contact:

T: 4006900926

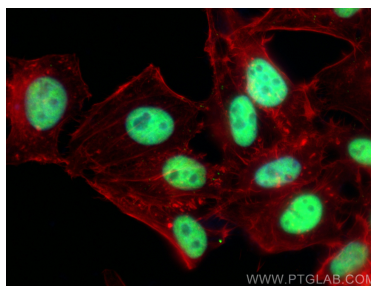
E: Proteintech-CN@ptglab.comW: ptgcn.com

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

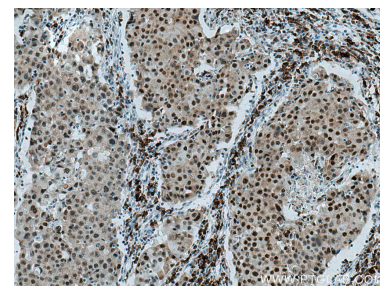
Selected Validation Data



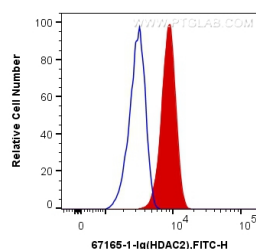
Various lysates were subjected to SDS PAGE followed by western blot with 67165-1-Ig (HDAC2 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using HDAC2 antibody (67165-1-Ig, Clone: 1A3E4) at dilution of 1:800 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L), CL594-Phalloidin (red).



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 67165-1-Ig (HDAC2 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1X10⁶ HepG2 cells were intracellularly stained with 0.4 ug Anti-Human HDAC2 (67165-1-Ig, Clone:1A3E4) and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Control Antibody. Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).