

HDAC1 Monoclonal antibody

Catalog Number: 66085-1-Ig 17 Publications

Basic Information

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| Catalog Number: 66085-1-Ig | GenBank Accession Number: BC000301 | Purification Method: Protein G purification |
| Concentration: 1000 ug/ml | GeneID (NCBI): 3065 | CloneNo.: 4C4G7 |
| Source: Mouse | UNIPROT ID: Q13547 | Recommended Dilutions: WB 1:5000-1:50000 IHC 1:2000-1:10000 IF/ICC 1:6000-1:24000 |
| Isotype: IgG1 | Full Name: histone deacetylase 1 | |
| Immunogen Catalog Number: AG19128 | Calculated MW: 55 kDa Observed MW: 65 kDa | |

Applications

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| Tested Applications: WB, IHC, IF/ICC, ELISA | Positive Controls: |
| Cited Applications: WB, IHC, IF, ChIP | WB : LNCaP cells, HeLa cells, HEK-293 cells, HepG2 cells, Jurkat cells, K-562 cells, HSC-T6 cells, NIH/3T3 cells, 4T1 cells |
| Species Specificity: human, mouse, rat | IHC : human lymphoma tissue, human lung cancer tissue, human prostate cancer tissue |
| Cited Species: human, mouse, rat | IF/ICC : A431 cells, HeLa cells |
| Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0 | |

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. The protein encoded by this gene belongs to the histone deacetylase/acuc/apha family and is a component of the histone deacetylase complex, which is responsible for gene expression silencing. It also plays an important role in the control of cell proliferation and differentiation by interacting with RB, p53 and other transcription factors. At least 4 classes of HDAC were identified. As a class I HDAC, HDAC 1 was primarily found in the nucleus. This antibody is raised against residues near the C terminus of human HDAC1. The calculated molecular weight of HDAC1 is 55 kDa, but modified HDAC1 is about 60-65 kDa.

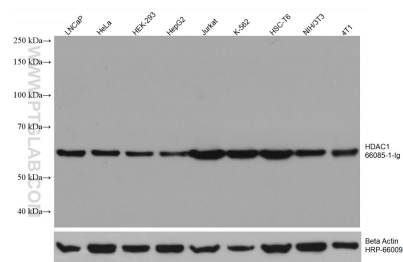
Notable Publications

| Author | Pubmed ID | Journal | Application |
|---------------|-----------|------------|-------------|
| Lifang Li | 28947780 | Nat Commun | WB |
| Pei Fan | 35711556 | Front Nutr | WB |
| Xiaohao Zhang | 33757583 | Biol Res | WB |

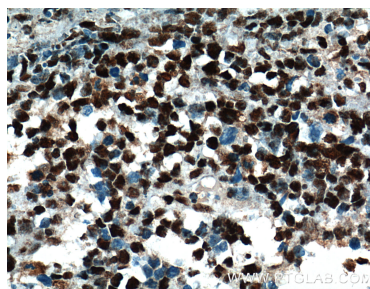
Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

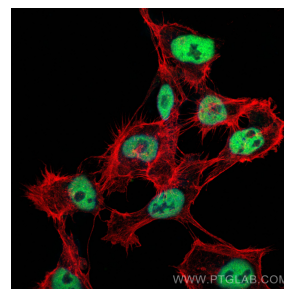
Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 66085-1-Ig (HDAC1 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated Beta Actin Monoclonal antibody (HRP-66009) as loading control.



Immunohistochemical analysis of paraffin-embedded human lymphoma tissue slide using 66085-1-Ig (HDAC1 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 A431 cells using HDAC1 antibody (66085-1-Ig, Clone: 4C4G7) at dilution of 1:12000 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L), CL594-Phalloidin (red).