

Product datasheet for CF502142

OriGene Technologies, Inc.

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HDAC1 Mouse Monoclonal Antibody [Clone ID: OTI5C3]

Product data:

Product Type: Primary Antibodies

Clone Name: OTI5C3
Applications: FC, IF, WB

Recommended Dilution: WB 1:200~500, IF 1:100, FLOW 1:100

Reactivity: Human, Rat, Monkey, Mouse

Host: Mouse Isotype: IgG2b

Clonality: Monoclonal

Immunogen: Full length human recombinant protein of human HDAC1 (NP_004955) produced in HEK293T

cell

Formulation: Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)

Reconstitution Method: For reconstitution, we recommend adding 100uL distilled water to a final antibody

concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)

Purification: Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Conjugation: Unconjugated

Storage: Store at -20°C as received.

Stability: Stable for 12 months from date of receipt.

Predicted Protein Size: 54.9 kDa

Gene Name: histone deacetylase 1

Database Link: NP 004955

Entrez Gene 297893 RatEntrez Gene 433759 MouseEntrez Gene 708441 MonkeyEntrez Gene

3065 Human Q13547





Background:

Histone acetylation and deacetylation, catalyzed by multisubunit complexes, play a key role in the regulation of eukaryotic gene expression. The protein encoded by this gene belongs to the histone deacetylase/acuc/apha family and is a component of the histone deacetylase complex. It also interacts with retinoblastoma tumor-suppressor protein and this complex is a key element in the control of cell proliferation and differentiation. Together with metastasis-associated protein-2, it deacetylates p53 and modulates its effect on cell growth and apoptosis. [provided by RefSeq]

Synonyms: GON-10; HD1; RPD3; RPD3L1

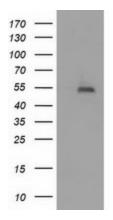
Protein Families: Adult stem cells, Druggable Genome, Stem cell - Pluripotency, Stem cell relevant signaling -

DSL/Notch pathway, Transcription Factors

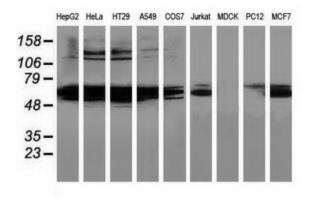
Protein Pathways: Cell cycle, Chronic myeloid leukemia, Huntington's disease, Notch signaling pathway,

Pathways in cancer

Product images:

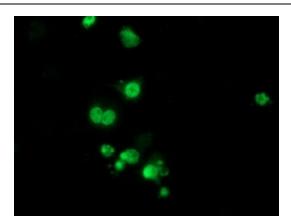


HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY HDAC1 ([RC201745], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-HDAC1. Positive lysates [LY417624] (100ug) and [LC417624] (20ug) can be purchased separately from OriGene.

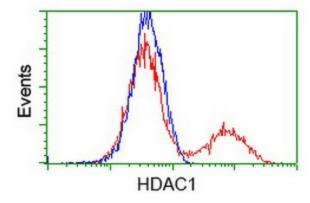


Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-HDAC1 monoclonal antibody.





Anti-HDAC1 mouse monoclonal antibody ([TA502142]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY HDAC1 ([RC201745]).



HEK293T cells transfected with either [RC201745] overexpress plasmid (Red) or empty vector control plasmid (Blue) were immunostained by anti-HDAC1 antibody ([TA502142]), and then analyzed by flow cytometry.