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HDAC1 Antibody (monoclonal) (M14)

Mouse monoclonal antibody raised against a full length recombinant HDAC1.
Catalog # AT2337a

Product Information

Application	WB, IHC, IF, E
Primary Accession	Q13547
Other Accession	BC000301
Reactivity	Human, Mouse, Rat
Host	mouse
Clonality	monoclonal
Isotype	IgG1 Kappa
Clone Names	5C11
Calculated MW	55103

Additional Information

Gene ID	3065
Other Names	Histone deacetylase 1, HD1, HDAC1, RPD3L1
Target/Specificity	HDAC1 (AAH00301, 1 a.a. ~ 482 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IHC~~1:100~500 IF~~1:50~200 E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	HDAC1 Antibody (monoclonal) (M14) is for research use only and not for use in diagnostic or therapeutic procedures.

Background

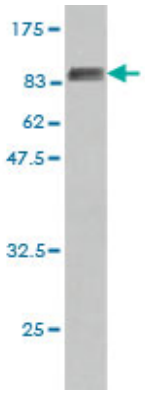
Histone acetylation and deacetylation, catalyzed by multisubunit complexes, play a key role in the regulation of eukaryotic gene expression. The protein encoded by this gene belongs to the histone deacetylase/acuc/apha family and is a component of the histone deacetylase complex. It also interacts with 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.

References

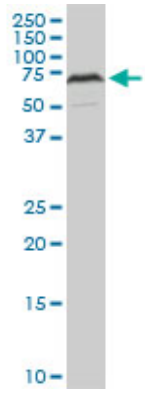
Combination of polymorphisms within the HDAC1 and HDAC3 gene predict tumor recurrence in

hepatocellular carcinoma patients that have undergone transplant therapy. Yang Z, et al. Clin Chem Lab Med, 2010 Aug 24. PMID 20731616.CCDC6 represses CREB1 activity by recruiting histone deacetylase 1 and protein phosphatase 1. Leone V, et al. Oncogene, 2010 Jul 29. PMID 20498639.Regulation of Nur77 protein turnover through acetylation and deacetylation induced by p300 and HDAC1. Kang SA, et al. Biochem Pharmacol, 2010 Sep 15. PMID 20438716.Class I histone deacetylases 1, 2 and 3 are highly expressed in classical Hodgkin's lymphoma. Adams H, et al. Expert Opin Ther Targets, 2010 Jun. PMID 20415600.Double PHD fingers protein DPF2 recognizes acetylated histones and suppresses the function of estrogen-related receptor alpha through histone deacetylase 1. Matsuyama R, et al. J Biol Chem, 2010 Jun 11. PMID 20400511.

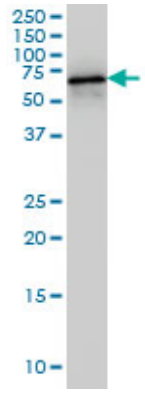
Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (78.76 KDa) .

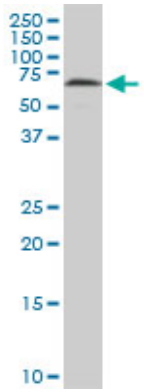


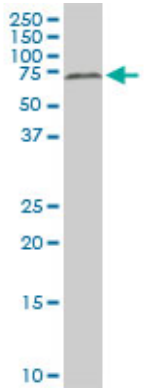
HDAC1 monoclonal antibody (M14), clone 5C11. Western Blot analysis of HDAC1 expression in PC-12 ((Cat # AT2337a)



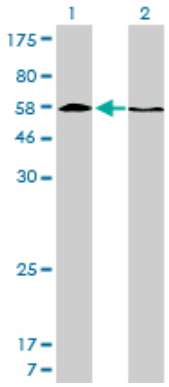
HDAC1 monoclonal antibody (M14), clone 5C11 Western Blot analysis of HDAC1 expression in Hela S3 NE ((Cat # AT2337a)

HDAC1 monoclonal antibody (M14), clone 5C11. Western Blot analysis of HDAC1 expression in Raw 264.7 ((Cat # AT2337a)



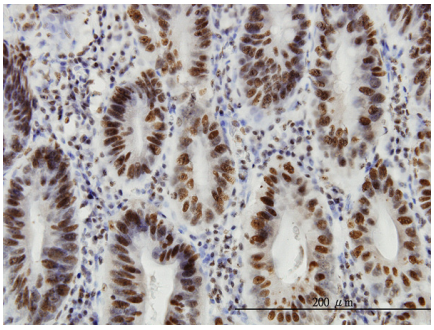


HDAC1 monoclonal antibody (M14), clone 5C11. Western Blot analysis of HDAC1 expression in NIH/3T3 ((Cat # AT2337a)

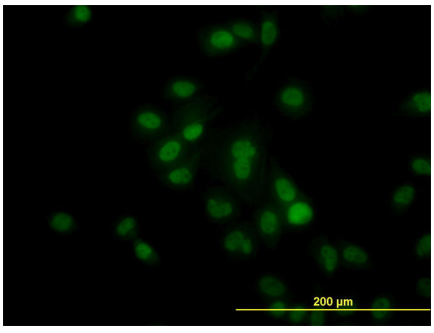


Western Blot analysis of HDAC1 expression in transfected 293T cell line by HDAC1 monoclonal antibody (M14), clone 5C11.

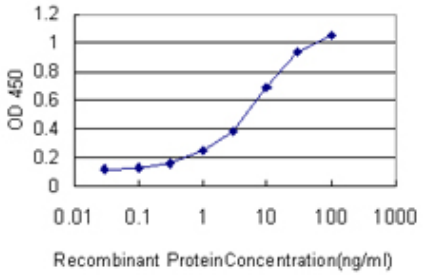
Lane 1: HDAC1 transfected lysate(55.1 KDa).
Lane 2: Non-transfected lysate.



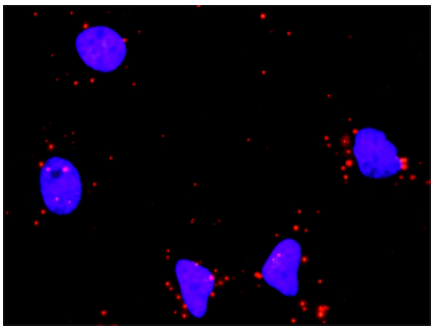
Immunoperoxidase of monoclonal antibody to HDAC1 on formalin-fixed paraffin-embedded human stomach. [antibody concentration 3 ug/ml]



Immunofluorescence of monoclonal antibody to HDAC1 on HeLa cell. [antibody concentration 10 ug/ml]



Detection limit for recombinant GST tagged HDAC1 is approximately 0.1ng/ml as a capture antibody.



Proximity Ligation Analysis of protein-protein interactions between NFKB1 and HDAC1 HeLa cells were stained with anti-NFKB1 rabbit purified polyclonal 1:1200 and anti-HDAC1 mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.