

## HDAC1 Antibody (monoclonal) (M06)

Mouse monoclonal antibody raised against a full length recombinant HDAC1. Catalog # AT2335a

#### **Specification**

## HDAC1 Antibody (monoclonal) (M06) - Product Information

Application WB, IHC, IF, E
Primary Accession Q13547
Other Accession BC000301

Reactivity Human, Mouse, Rat

Host mouse
Clonality Monoclonal
Isotype IgG1 Kappa
Calculated MW 55103

#### HDAC1 Antibody (monoclonal) (M06) - Additional Information

#### **Gene ID 3065**

# Other Names

Histone deacetylase 1, HD1, HDAC1, RPD3L1

#### Target/Specificity

HDAC1 (AAH00301, 1 a.a.  $\sim$  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) (M06) is for research use only and not for use in diagnostic or therapeutic procedures.

## HDAC1 Antibody (monoclonal) (M06) - Protocols

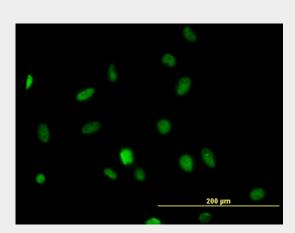
Provided below are standard protocols that you may find useful for product applications.

• Western Blot

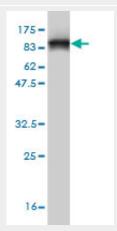


- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

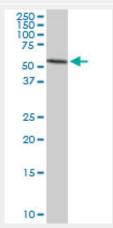
# HDAC1 Antibody (monoclonal) (M06) - Images



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

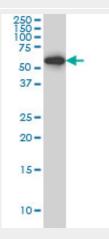


Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (78.76 KDa) .

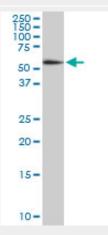




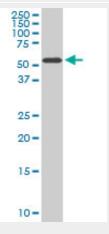
HDAC1 monoclonal antibody (M06), clone 1D6. Western Blot analysis of HDAC1 expression in PC-12 ( (Cat # AT2335a )



HDAC1 monoclonal antibody (M06), clone 1D6 Western Blot analysis of HDAC1 expression in Hela S3 NE ( (Cat # AT2335a )

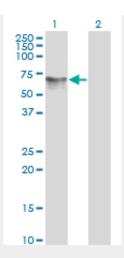


HDAC1 monoclonal antibody (M06), clone 1D6. Western Blot analysis of HDAC1 expression in Raw 264.7 ( (Cat # AT2335a )



HDAC1 monoclonal antibody (M06), clone 1D6. Western Blot analysis of HDAC1 expression in NIH/3T3 ( (Cat # AT2335a )

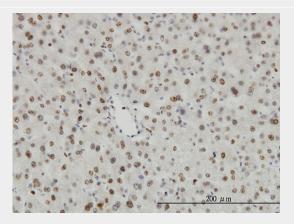




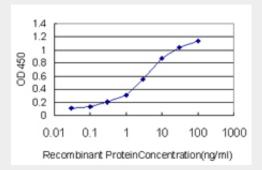
Western Blot analysis of HDAC1 expression in transfected 293T cell line by HDAC1 monoclonal antibody (M06), clone 1D6.

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 liver. [antibody concentration 3 ug/ml]



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

#### HDAC1 Antibody (monoclonal) (M06) - 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





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control of cell proliferation and differentiation. Together with metastasis-associated protein-2, it deacetylates p53 and modulates its effect on cell growth and apoptosis.

## **HDAC1** Antibody (monoclonal) (M06) - 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.