

# HDAC3 Antibody (monoclonal) (M03)

Mouse monoclonal antibody raised against a partial recombinant HDAC3. Catalog # AT2339a

## **Product Information**

Application	WB, IF
Primary Accession	<u>015379</u>
Other Accession	<u>NM_003883</u>
Reactivity	Human, Mouse, Rat
Host	mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	2A3
Calculated MW	48848

## **Additional Information**

Gene ID	8841
Other Names	Histone deacetylase 3, HD3, RPD3-2, SMAP45, HDAC3
Target/Specificity	HDAC3 (NP_003874, 319 a.a. ~ 428 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IF~~1:50~200
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	HDAC3 Antibody (monoclonal) (M03) is for research use only and not for use in diagnostic or therapeutic procedures.

### Background

Histones play a critical role in transcriptional regulation, cell cycle progression, and developmental events. Histone acetylation/deacetylation alters chromosome structure and affects transcription factor access to DNA. The protein encoded by this gene belongs to the histone deacetylase/acuc/apha family. It has histone deacetylase activity and represses transcription when tethered to a promoter. It may participate in the regulation of transcription through its binding with the zinc-finger transcription factor YY1. This protein can also down-regulate p53 function and thus modulate cell growth and apoptosis. This gene is regarded as a potential tumor suppressor gene.

### 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.Association of histone deacetylase genes with schizophrenia in Korean population. Kim T, et al. Psychiatry Res, 2010 Jul 30. PMID 20471694.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.Down-regulation of PROS1 gene expression by 17beta-estradiol via estrogen receptor alpha (ERalpha)-Sp1 interaction recruiting receptor-interacting protein 140 and the corepressor-HDAC3 complex. Suzuki A, et al. J Biol Chem, 2010 Apr 30. PMID 20200160.Type-specific roles of histone deacetylase (HDAC) overexpression in ovarian carcinoma: HDAC1 enhances cell proliferation and HDAC3 stimulates cell migration with downregulation of E-cadherin. Hayashi A, et al. Int J Cancer, 2010 Sep 1. PMID 20049841.

#### Images



HDAC3 monoclonal antibody (M03), clone 2A3. Western Blot analysis of HDAC3 expression in Raw 264.7((Cat # AT2339a )



HDAC3 monoclonal antibody (M03), clone 2A3. Western Blot analysis of HDAC3 expression in NIH/3T3((Cat # AT2339a )



Immunofluorescence of monoclonal antibody to HDAC3 on HeLa cell. [antibody concentration 10 ug/ml]

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