HDAC3 Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

Product Name	HDAC3, Polyclonal Antibody
Full Product Name	HDAC3 Rabbit pAb
Product Gene Name	anti-HDAC3 antibody
Product Synonym Names	HD3; Histone deacetylase 3; RPD3-2; SMAP45; HDAC3
Clonality	Polyclonal
Isotype	IgG
Host	Rabbit
Species Reactivity	Human, Mouse, Rat
Form/Format	In phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% Sodium Azide and 50% Glycerol.
Purity/Purification	Affinity Chromatography
Preparation and Storage	Store at 4 degree C short term. Store at -20 degree C long term. Avoid freeze/thaw cycle.
Molecular Weight	49kDa
OMIM	605166
3D Structure	ModBase 3D Structure for O15379
Immunogen	A synthesized peptide derived from human HDAC3
Cellular Localization	Cytoplasm, Nucleus
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Applications Tested/Suitable for anti-HDAC3 antibody	Western Blot (WB), Immunohistochemistry (IHC), Immunocytochemistry (ICC), Immunofluorescence (IF), Immunoprecipitation (IP)
Application Notes for anti-HDAC3 antibody	WB: 1:1000-1:2000 IHC: 1:50-1:100 ICC/IF: 1:50-1:200 IP: 1:30
Related Product Information for anti-HDAC3 antibody	HDAC3 is a nuclear and cytoplasmic protein that deacetylates both histone (H2A, H3, H4) and non-histone substrates (RelA, SRY, p53, MEF2, PCAF and p300/CBP). HDAC3 deacetylase activity is stimulated by interactions with the N-CoR and SMRT co-repressor proteins. Together, these three proteins form a functional complex that represses transcription associated with nuclear hormone receptors and other transcription factors, including Rev-Erb, COUP-TF, DAX1, MAD and Pit-1.
Other Notes	Small volumes of anti-HDAC3 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for HDAC3 purchase	MBS8542615 is an antibody targeting HDAC3. Also known as HDAC3 Rabbit pAb. Reactive in Human, Mouse, Rat. Host: Rabbit.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for HDAC3. It may not necessarily be applicable to this product.

NCBI GI #	13128862

NCBI GeneID	8841
NCBI Accession #	NP_003874.2
UniProt Primary Accession #	O15379
UniProt Related Accession #	O15379
GenBank Nucleotide #	NP_003874.2
NCBI Official Full Name	histone deacetylase 3 isoform 2
NCBI Official Synonym Full Names	histone deacetylase 3
NCBI Official Symbol	HDAC3
NCBI Official Synonym Symbols	HD3; RPD3; KDAC3; RPD3-2
UniProt Protein Name	Histone deacetylase 3
UniProt Synonym Protein Names	RPD3-2; SMAP45
Protein Family	Histone deacetylase
UniProt Gene Name	HDAC3
UniProt Synonym Gene Names	HD3
UniProt Entry Name	HDAC3_HUMAN
NCBI Protein Information	histone deacetylase 3
NCBI Summary for HDAC3	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. [provided by RefSeq, Jul 2008]

UniProt Comments for HDAC3	HDAC3: Responsible for the deacetylation of lysine residues on the N-terminal part of the core histones (H2A, H2B, H3 and H4), and some other non-histone substrates. Histone deacetylation gives a tag for epigenetic repression and plays an important role in transcriptional regulation, cell cycle progression and developmental events. Histone deacetylases act via the formation of large multiprotein complexes. Probably participates in the regulation of transcription through its binding to the zinc-finger transcription factor YY1; increases YY1 repression activity. Required to repress transcription of the POU1F1 transcription factor. Acts as a molecular chaperone for shuttling phosphorylated NR2C1 to PML bodies for sumoylation. Interacts with HDAC7 and HDAC9. Forms a heterologous complex at least with YY1. Interacts with DAXX, HDAC10 and DACH1. Found in a complex with NCOR1 and NCOR2. Component of the N-Cor repressor complex, at least composed of NCOR1, NCOR2, HDAC3, TBL1X, TBL1R, CORO2A and GPS2. Interacts with BCOR, MJD2A/JHDM3A, NRIP1, PRDM6 and SRY. Interacts with BTBD14B. Interacts with GLIS2. Interacts (via the DNA-binding domain) with NR2C1; the interaction recruits phosphorylated NR2C1 to PML bodies for sumoylation. Component of the Notch corepressor complex. Interacts with CBFA2T3 and NKAP. Interacts with APEX1; the interaction is not dependent on the acetylated status of APEX1. Interacts with and deacetylates MAPK14. Interacts with ZMYND15. Widely expressed. Belongs to the histone deacetylase family. HD type 1 subfamily. 2 isoforms of the human protein are produced by alternative splicing. Protein type: Cell cycle regulation; Apoptosis; Nuclear receptor co-regulator; Transcription, coactivator/corepressor; Deacetylase; EC 3.5.1.98 Chromosomal Location of Human Ortholog: 5q31 Cellular Component: nucleoplasm; Golgi apparatus; transcriptional repressor complex; spindle microtubule; cytoplasm; histone deacetylase complex; plasma membrane; nucleus Molecular Function: protein binding; cyclin binding; NAD-dependent histone deacetylase activity (H3-K9 specific); enzyme binding; NAD-dependent histone deacetylase activity (H3-K14 specific); chromatin DNA binding; histone deacetylase binding; protein deacetylase activity; NAD-dependent histone deacetylase activity (H4-K16 specific); chromatin binding; histone deacetylase activity; transcription factor binding; transcription corepressor activity Biological Process: circadian rhythm; negative regulation of JNK cascade; establishment and/or maintenance of chromatin architecture; Notch signaling pathway; transcription, DNA-dependent; nerve growth factor receptor signaling pathway; regulation of mitotic cell cycle; regulation of multicellular organism growth; regulation of protein stability; chromatin modification; spindle assembly; cellular lipid metabolic process; negative regulation of transcription from RNA polymerase II promoter; negative regulation of cell cycle; protein amino acid deacetylation; positive regulation of transcription factor import into nucleus; positive regulation of transcription from RNA polymerase II promoter; positive regulation of protein amino acid phosphorylation; circadian regulation of gene expression; negative regulation of transcription, DNA-dependent; positive regulation of TOR signaling pathway; negative regulation of apoptosis
Research Articles on HDAC3	**1.** High activity of HDAC3 stabilizes c-Myc (v-myc myelocytomatosis viral oncogene homolog) protein by preferential deacetylation of cMyc at the K323 site, which contributes to the low pyruvate levels.
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.
Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

MyBioSource | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/polyclonal-human-mouse-rat-antibody/hdac3/8542615