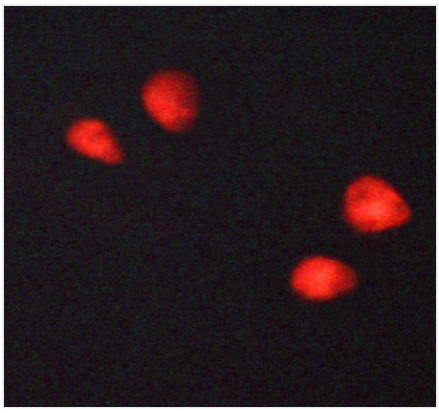
HDAC3 Antibody – Rabbit Polyclonal

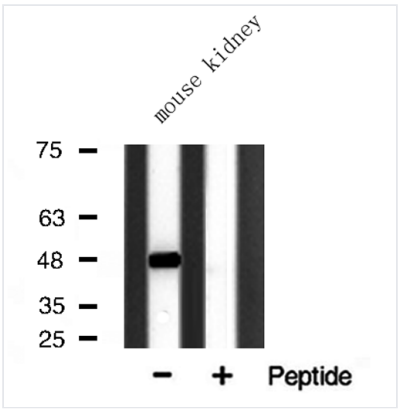
PRODUCT OVERVIEW

Product Name	HDAC3, Polyclonal Antibody
Full Product Name	HDAC3 Antibody
Product Gene Name	anti-HDAC3 antibody
Product Synonym Names	HD3; HDAC 3; HDAC3; HDAC3_HUMAN; Histone deacetylase 3; RPD3 2; RPD3; RPD3-2; SMAP45
Clonality	Polyclonal
Isotype	IgG
Host	Rabbit
Species Reactivity	Human, Mouse, Rat
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Concentration	1mg/ml (lot specific)
Specificity	HDAC3 antibody detects endogenous levels of total HDAC3
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.
Antibody/Peptide Pairs	HDAC3 peptide (MBS9617211) is used for blocking the activity of HDAC3 antibody (MBS9601679)
Molecular Weight	Observed: 48 kDa Predicted: 49 kDa
3D Structure	ModBase 3D Structure for O15379
Supply Chain Verification	Manufactured in a lab with traceable raw materials manufactured on site. Coordinated product portfolio of antibodies, pairs, conjugates, recombinant proteins, and immunoassay materials available, please inquire.
Immunogen	A synthesized peptide derived from human HDAC3
Subcellular Location	Nucleus.
Tissue Specificity	Widely expressed.
Predicted Cross Reactivity	**Pig, Zebrafish, Horse, Sheep, Rabbit, Dog, Chicken, Xenopus**
Similarity	Pig (100%), Zebrafish (89%), Horse (100%), Sheep (100%), Rabbit (100%), Dog (100%), Chicken (100%), Xenopus (100%)
Conjugation	Unconjugated
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Applications Tested/Suitable for anti-HDAC3 antibody	Western Blot (WB), Immunohistochemisty (IHC), Immunofluorescence (IF), Immunocytochemistry (ICC), ELISA (EIA)
Application Notes for anti-HDAC3 antibody	WB: 1:500-1:2000 IHC: 1:50-1:200 IF/ICC: 1:100-1:500

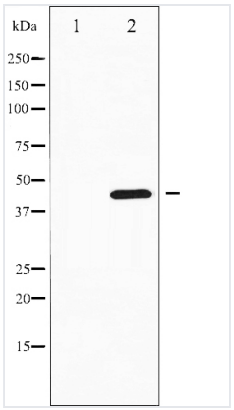
Related Product Information for anti-HDAC3 antibody	Description: Histones play a critical role in transcriptional regulation, cell cycle progression, and developmental events. Histone acetylation/deacetylation alters chromosome structure and affects transcription factor access to DNA. Function: Responsible 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. Participates in the BCL6 transcriptional repressor activity by deacetylating the H3 'Lys-27' (H3K27) on enhancer elements, antagonizing EP300 acetyltransferase activity and repressing proximal gene expression. 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 (PubMed:21444723, PubMed:23911289). Contributes, together with XBP1 isoform 1, to the activation of NFE2L2-mediated HMOX1 transcription factor gene expression in a PI3K/mTORC2/Akt-dependent signaling pathway leading to endothelial cell (EC) survival under disturbed flow/oxidative stress (PubMed:25190803). Subunit Structure: 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. Interacts with SMRT/NCOR2 and BCL6 on DNA enhancer elements. Interacts with INSM1 (PubMed:10655483, PubMed:10669754, PubMed:10860984, PubMed:10898795, PubMed:11006275, PubMed:11466315, PubMed:11533236, PubMed:11861901, PubMed:14525983, PubMed:14633989, PubMed:15297880, PubMed:15927959, PubMed:16569215, PubMed:18417529, PubMed:19409814, PubMed:23911289). Interacts with XBP1 isoform 1; the interaction occurs in endothelial cell (EC) under disturbed flow (PubMed:25190803). Interacts (via C-terminus) with CCAR2 (via N-terminus). Interacts with and deacetylates MEF2D. Interacts with BEND3. Interacts with NKAPL (By similarity). Post-translational Modifications: Sumoylated in vitro. Similarity: Belongs to the histone deacetylase family. HD type 1 subfamily.
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	MBS9601679 is an antibody targeting HDAC3. Also known as HDAC3 Antibody. Reactive in Human, Mouse, Rat. Host: Rabbit.



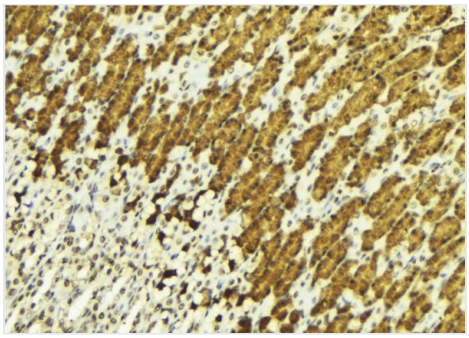
Immunofluorescence (IF) of anti-HDAC3 antibody
MBS9601679 staining MCF-7 cells by ICC/IF. Cells were fixed with PFA and permeabilized in 0.1% saponin prior to blocking in 10% serum for 45 minutes at 37 degree C. The primary antibody was diluted 1/400 and incubated with the sample for 1 hour at 37 degree C. A Alexa Fluor 594 conjugated goat polyclonal to rabbit IgG (H+L), diluted 1/600 was used as secondary antibody.



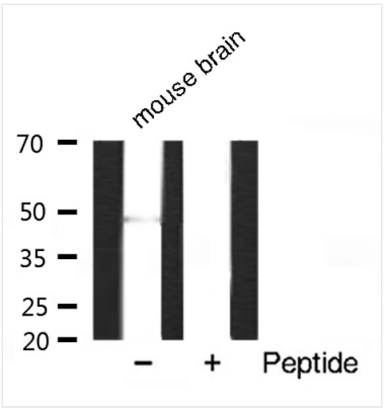
Western Blot (WB) of anti-HDAC3 antibody
Western blot analysis of HDAC3 expression in Mouse kidney lysate



Western Blot (WB) of anti-HDAC3 antibody
Western blot analysis of HDAC3 expression in NIH-3T3 whole cell lysates, The lane on the left is treated with the antigen-specific peptide.



Immunohistochemistry (IHC) of anti-HDAC3 antibody
MBS9601679 at 1/100 staining Human gastric tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



Western Blot (WB) of anti-HDAC3 antibody
Western blot analysis of extracts of various sample, using GATA3 antibody.

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 Secondary Accession #	O43268; Q9UEI5; Q9UEV0; D3DQE1
UniProt Related Accession #	O15379
GenBank Nucleotide #	NM_003883.3
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; 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
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	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. Participates in the BCL6 transcriptional repressor activity by deacetylating the H3 'Lys-27' (H3K27) on enhancer elements, antagonizing EP300 acetyltransferase activity and repressing proximal gene expression. 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 (PubMed:21444723, PubMed:23911289). Contributes, together with XBP1 isoform 1, to the activation of NFE2L2-mediated HMOX1 transcription factor gene expression in a PI3K/mTORC2/Akt-dependent signaling pathway leading to endothelial cell (EC) survival under disturbed flow/oxidative stress (PubMed:25190803).
Research Articles on HDAC3	**1.** High HDAC3 expression is closely correlated with ER-negative expression, PR-negative expression, HER2 overexpression, PT stage, and clinical stage of breast tumors.
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/hdac3/9601679