

Datasheet for 200-301-V03**HDAC3 Antibody****Overview**

Description:	Anti-HDAC3 (MOUSE) Monoclonal Antibody - 200-301-V03
Item No.:	200-301-V03
Size:	50 µg
Applications:	ChIP, IF
Reactivity:	Human
Host Species:	Mouse

Product Details

Background:	HDAC3 catalyses the deacetylation of lysine residues in the N-terminal part of the core histones (H2A, H2B, H3 and H4). Acetylation and deacetylation of these highly conserved lysine residues is important for the control of gene expression and HDAC activity is associated with gene repression. Histone deacetylation is established by the formation of large multiprotein complexes. HDAC3 may bind to the zinc-finger transcription factor YY1, thereby regulating transcription. It is also able to modulate cell growth and apoptosis through the interaction with p53 and is thought to be essential for the repression of the POU1F1 transcription factor. Anti-HDAC3 Antibody is ideal for research in Epigenetics and Gene Expression.
Synonyms:	HD3, RPD3-2, SMAP45
Host Species:	Mouse
Clonality:	Monoclonal
Format:	IgG1

Target Details

Gene Name:	HDAC3
Reactivity:	Human
Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-HDAC3 Antibody was produced in mice by repeated immunization with a synthetic peptide containing a sequence from the C-terminal region of the human HDAC3 protein.

Purity/Specificity:	Anti-HDAC3 Antibody was purified by Protein A chromatography. Cross-reactivity with HDAC3 from other sources has not been determined.
Relevant Links:	• UniProtKB - O15379 • GeneID - 8841 • NCBI - NP_003874.2

Application Details

Tested Applications:	ChIP, IF
Application Note:	Anti-HDAC3 Antibody is tested for Chromatin Immunoprecipitation and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 48.8 kDa in the appropriate cell lysate or extract.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ChIP:	2 µg/ChIP
IF:	1:500

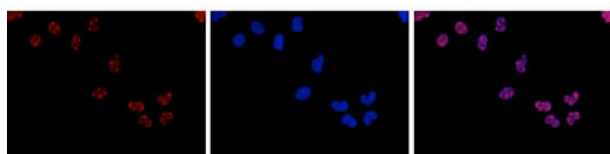
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	2 mg/ml by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.05% (w/v) Sodium Azide and 0.05% ProClin 300
Stabilizer:	None

Shipping & Handling

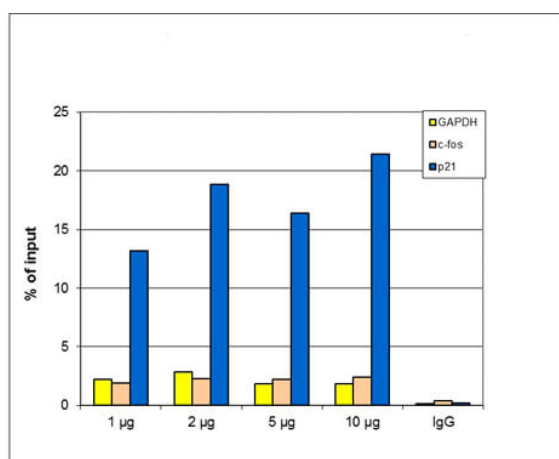
Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Immunofluorescence Microscopy

Immunofluorescence Microscopy results of Mouse anti-HDAC3 antibody. Tissue: HeLa cells. Fixation: 4% formaldehyde for 10 min. Block: PBS/Triton X-100/5% normal goat serum and 1% BSA. Primary antibody: HDAC3 antibody at 1:500 for 1 hr at RT (left). Secondary antibody: anti-Mouse Alexa594 secondary antibody at 1:10,000 for 45 min at RT. Staining: HDAC3 antibody as red fluorescent signal (left), DAPI blue (middle), merge of the two stainings (right).



ChIP

Chromatin Immunoprecipitation results for Anti-HDAC3 antibody. ChIP assays were performed using HeLa cells with Anti-HDAC3 antibody and optimized PCR primer sets for qPCR. A titration of the antibody consisting of 1, 2, 5, and 10 µg per ChIP experiment was analyzed. IgG (5 µg/IP) was used as negative IP control. qPCR was performed with primers for the promoters of the active genes c-fos and GAPDH, and for the coding region of p21, a known target gene of HDAC3. This figure shows the recovery, expressed as a % of input (the relative amount of immunoprecipitated DNA compared to input DNA after qPCR analysis).

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.