Product Datasheet

HDAC3 Antibody - BSA Free
NB100-1669SS

Unit Size: 0.025 mg

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

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Publications: 9

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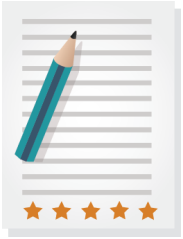
Updated 4/13/2025 v.20.1



NB100-1669SS

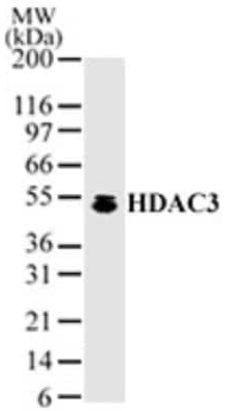
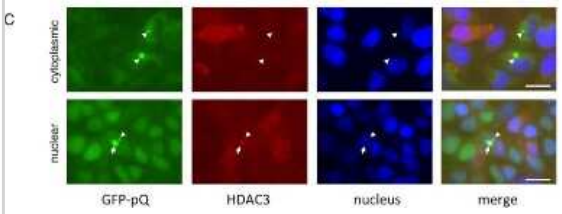
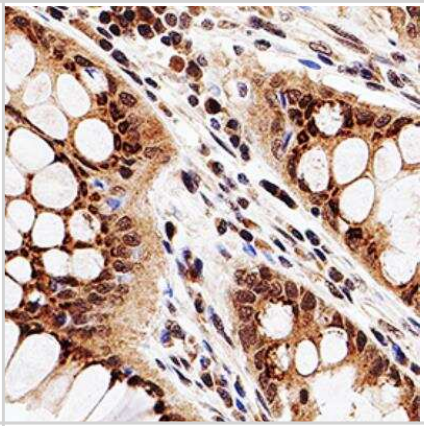
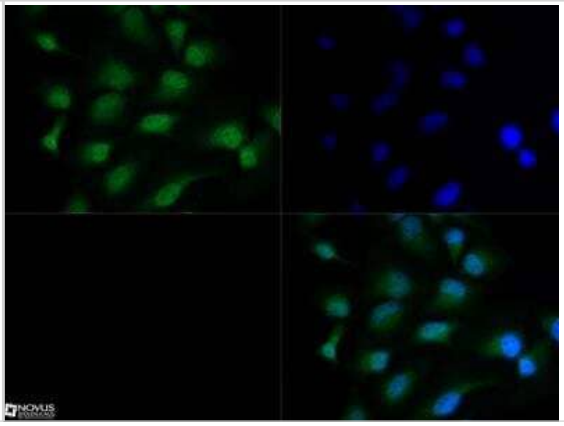
HDAC3 Antibody - BSA Free

Product Information	
Unit Size	0.025 mg
Concentration	1.0 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.05% Sodium Azide
Isotype	IgG
Purity	Protein G purified
Buffer	PBS

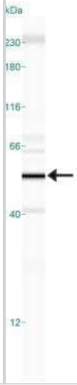
Product Description	
Host	Rabbit
Gene ID	8841
Gene Symbol	HDAC3
Species	Human
Reactivity Notes	Immunogen sequence has 100% homology with many species.
Specificity/Sensitivity	In HeLa, a 50 kDa band is observed.
Immunogen	This antibody was generated by immunizing rabbits with a synthetic peptide corresponding to amino acids 2-17 of human HDAC3.

Product Application Details	
Applications	Western Blot, Simple Western, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin, Immunoprecipitation, Chromatin Immunoprecipitation (ChIP)
Recommended Dilutions	Western Blot 2 - 5ug/ml, Simple Western 1:25, Immunohistochemistry 1:10-1:500, Immunocytochemistry/ Immunofluorescence 1:10, Immunoprecipitation 1:10-1:500, Immunohistochemistry-Paraffin 1:10-1:500, Chromatin Immunoprecipitation (ChIP) 1:20-1:1000
Application Notes	In HeLa, a 50 kDa band is observed. In Simple Western only 10 - 15 uL of the recommended dilution is used per data point. See Simple Western Antibody Database for Simple Western validation: Tested in HeLa lysate 1.0 mg/mL, separated by Size, antibody dilution of 1:25, apparent MW was 55 kDa. Separated by Size-Wes, Sally Sue/Peggy Sue.

Images

Western Blot: HDAC3 Antibody [NB100-1669] - Analysis of HDAC3 in HeLa cell lysate with anti-HDAC3 this antibody.	
Immunocytochemistry/Immunofluorescence: HDAC3 Antibody [NB100-1669] - HDAC3 preferably binds to nuclear Htt with long Qs. HDAC3 associates exclusively with nuclear inclusion bodies. E3 or N3 cells were fixed and stained with anti-HDAC3 antibodies and visualized by Alexa 546 conjugated secondary antibodies. Arrowheads: inclusion bodies with no HDAC3 signals associated. Arrows: HDAC3 signal-associated inclusion bodies. Bar=20 um. Image collected and cropped by CiteAb from the following publication (https://dx.plos.org/10.1371/journal.pone.0111277), licensed under a CC-BY license.	
Immunohistochemistry-Paraffin: HDAC3 Antibody [NB100-1669] - Analysis human colon cancer using 1:50 conc. of HDAC3 antibody on a Bond Rx autostainer (Leica Biosystems). The assay involved 20 minutes of heat induced antigen retrieval (HIER) using 10mM sodium citrate buffer (pH 6.0) and endogenous peroxidase quenching with peroxide block. The sections were incubated with primary antibody for 30 minutes and Bond Polymer Refine Detection (Leica Biosystems) with DAB was used for signal development followed by counterstaining with hematoxylin. Whole slide scanning and capturing of representative images was performed using Aperio AT2 (Leica Biosystems). Nuclear staining of HDAC3 was observed. Staining was performed by Histowiz.	
Immunocytochemistry/Immunofluorescence: HDAC3 Antibody [NB100-1669] - HDAC3 antibody was tested in HeLa cells with DyLight 488 (green). Nuclei were counterstained with DAPI (blue). An antibody dilution of 1:10 was used. Image objective 40x.	

Simple Western: HDAC3 Antibody [NB100-1669] - Lane view shows a specific band for HDAC3 in 1.0 mg/ml of HeLa lysate. This experiment was performed under reducing conditions using the 12-230 kDa separation system.



Publications

Baek, M H, Park, J Y Et al. The combination of histone deacetylase and p53 expressions and histological subtype has prognostic implication in uterine leiomyosarcoma. Jpn J Clin Oncol 2019-08-01 [PMID: 31329907] (IP, Mouse)

Wang J, Liu R, Wang Y Et Al. Repression of the miR-627-5p by histone deacetylase 3 contributes to hypoxia-induced hepatocellular carcinoma progression J Cancer 2021-08-02 [PMID: 34335948] (Chemotaxis)

Baek MH, Park JY, Rhim CC et al. Immunohistochemical Characterization of Histone Deacetylase as a Potential Prognostic Marker and Therapeutic Target in Endometrial Stromal Sarcoma. Anticancer Res. 2016-05-01 [PMID: 27127168] (IHC-P, Human)

Jiang Chunling, Zhou Bingsen, Fan Kenneth et al. A sequential treatment of depsipeptide followed by 5-azacytidine enhances Gadd45beta expression in hepatocellular carcinoma cells. Anticancer Res. 2007-11-01 [PMID: 18225533] (WB, Human)

Mano T, Suzuki T, Tsuji S, Iwata A. Differential Effect of HDAC3 on Cytoplasmic and nuclear Huntingtin Aggregates PLoS OnE et al. 2014-11-08 [PMID: 25380050] (ICC/IF, WB, Human)

Details:
HDAC3 antibody used for WB on HeLa derived E3 or n3 cells transfected or not with shRnA HDAC3 (Figure 2). Antibody also used for ICC-IF on 4% paraformaldehyd fixed E3 or n3 cells - HDAC3 associates exclusively with nuclear inclusion bodies (Figure 4C)

Imbriano C, Gurtner A, Cocchiarella F et al. Direct p53 transcriptional repression: in vivo analysis of CCAAT-containing G2/M promoters. Mol Cell Biol. 2005-05-01 [PMID: 15831478] (Chemotaxis)

Wilson AJ, Byun DS, Nasser S et al. HDAC4 promotes growth of colon cancer cells via repression of p21. Mol Biol Cell. 2008-10-01 [PMID: 18632985]

Details:
Human HTC116 cells: 1. HDAC1 (IMG-337): WB: Figs. 2A,B; 5D. 2. HDAC4 (IMG-338): WB: Figs. 1A, E, F, 4C, 5D, 6A, 7B; ChIP: Figs. 10A,C,D,H.

Caretti G, Salsi V, Vecchi C et al. Dynamic recruitment of NF-Y and histone acetyltransferases on cell-cycle promoters. J Biol Chem. 2003-08-15 [PMID: 12771133] (Chemotaxis)

Details:
ChIP, Fig. 3

Wilson AJ, Byun DS, Popova N et al. Histone deacetylase 3 (HDAC3) and other class I HDACs regulate colon cell maturation and p21 expression and are deregulated in human colon cancer. J Biol Chem. 2006-05-12 [PMID: 16533812]

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