Product Datasheet

HDAC5 Antibody - BSA Free
NBP2-22152

Unit Size: 0.1 ml

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

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Reviews: 1 Publications: 5

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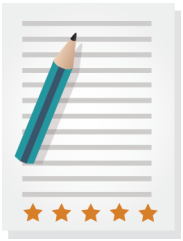
Updated 9/9/2025 v.20.1



NBP2-22152

HDAC5 Antibody - BSA Free

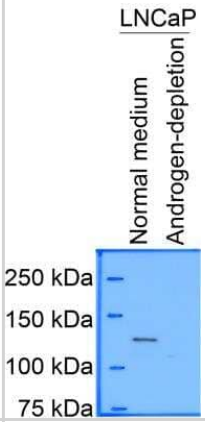
Product Information	
Unit Size	0.1 ml
Concentration	1.0 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.02% Sodium Azide
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	PBS
Target Molecular Weight	130 kDa

Product Description	
Description	Novus Biologicals Rabbit HDAC5 Antibody - BSA Free (NBP2-22152) is a polyclonal antibody validated for use in IHC, WB, ICC/IF and ChIP. Anti-HDAC5 Antibody: Cited in 5 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Rabbit
Gene ID	10014
Gene Symbol	HDAC5
Species	Human, Mouse, Rat, Primate
Reactivity Notes	Rat reactivity reported in scientific literature (Kim et al).
Immunogen	A synthetic peptide made to an N-terminal portion of the human HDAC5 protein (between residues 1-100) [UniProt Q9UQL6]

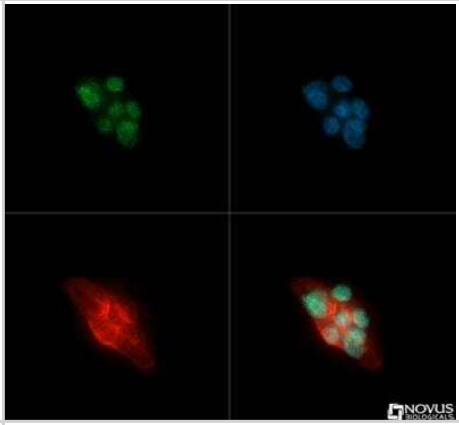
Product Application Details	
Applications	Western Blot, Immunohistochemistry-Paraffin, Chromatin Immunoprecipitation, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Chromatin Immunoprecipitation (ChIP)
Recommended Dilutions	Western Blot 1.0 - 2.0 ug/ml, Chromatin Immunoprecipitation reported in scientific literature (PMID 32196931), Immunohistochemistry 1:50 - 1:100, Immunocytochemistry/ Immunofluorescence 1:100 - 1:200, Immunohistochemistry-Paraffin 1:50 - 1:100, Chromatin Immunoprecipitation (ChIP)
Application Notes	In Western blot a band was observed ~ 130 kDa. In ICC/IF nuclear staining was observed in A431 cells. Prior to immunostaining paraffin tissues, antigen retrieval with sodium citrate buffer (pH 6.0) is recommended. The observed molecular weight of the protein may vary from the listed predicted molecular weight due to post translational modifications, post translation cleavages, relative charges, and other experimental factors.

Images

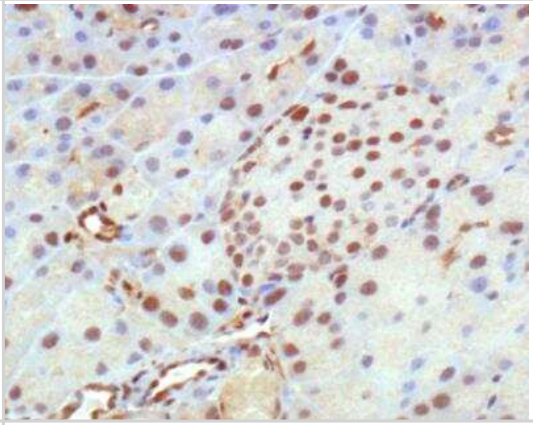
Western Blot: HDAC5 Antibody [NBP2-22152] - LNCaP cells with normal medium and with androgen depletion. Image from verified customer review.



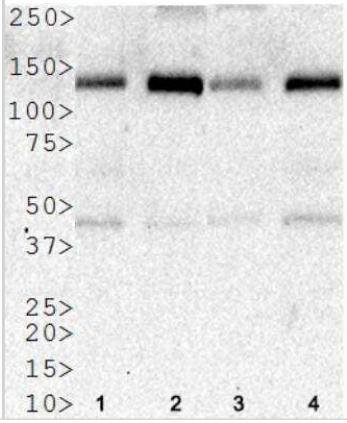
Immunocytochemistry/Immunofluorescence: HDAC5 Antibody [NBP2-22152] - HDAC5 antibody was tested in A431 cells with FITC (green). Nuclei and alpha-tubulin were counterstained with DAPI (blue) and Dylight 550 (red).



Immunohistochemistry: HDAC5 Antibody [NBP2-22152] - IHC analysis of HDAC5 in mouse pancreas.



Western Blot: HDAC5 Antibody [NBP2-22152] - WB analysis of HDAC5 in 1. HeLa, 2. Ntera 2, 3. HepG2 and 4. MCF7 cell lysates.



Publications

Laura Lecce, Yang Xu, Bhargavi V'Gangula, Nirupama Chandel, Venu Pothula, Axelle Caudrillier, Maria Paola Santini, Valentina d'Escamard, Delaine K. Ceholski, Przemek A. Gorski, Lijiang Ma, Simon Koplev, Martin Mæng Bjørklund, Johan L.M. Björkegren, Manfred Boehm, Jacob Fog Bentzon, Valentin Fuster, Ha Won Kim, Neal L. Weintraub, Andrew H. Baker, Emily Bernstein, Jason C. Kovacic Histone deacetylase 9 promotes endothelial-mesenchymal transition and an unfavorable atherosclerotic plaque phenotype The Journal of Clinical Investigation 2021-08-02 [PMID: 34338228]

Kohno M, Kobayashi S, Yamamoto T et al. Enhancing calmodulin binding to cardiac ryanodine receptor completely inhibits pressure-overload induced hypertrophic signaling Commun Biol 2020-11-26 [PMID: 33244105] (IF/IHC, Mouse)

Tyler C R S, Smoake J J W et al. Sex-Dependent Effects of the Histone Deacetylase Inhibitor, Sodium Valproate, on Reversal Learning After Developmental Arsenic Exposure. Front Genet 2018-03-07 [PMID: 29963072] (WB, Mouse)

Lee Jo, Byun Ws, Kang Mj et Al. The myokine meteorin-like (metrnl) improves glucose tolerance in both skeletal muscle cells and mice by targeting AMPK alpha 2 FEBS J. 2020-03-20 [PMID: 32196931] (Chemotaxis, Mouse)

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)

Procedures

Western Blot protocol for HDAC5 Antibody (NBP2-22152)
HDAC5 Antibody:
Western Blot Protocol

1. Perform SDS-PAGE on samples to be analyzed, loading 25 ug of total protein per lane.
2. Transfer proteins to membrane according to the instructions provided by the manufacturer of the membrane and transfer apparatus.
3. Stain according to standard Ponceau S procedure (or similar product) to assess transfer success, and mark molecular weight standards where appropriate.
4. Rinse the blot.
5. Block the membrane using standard blocking buffer for at least 1 hour.
6. Wash the membrane in wash buffer three times for 10 minutes each.
7. Dilute anti-HDAC5 primary antibody in blocking buffer and incubate 1 hour at room temperature.
8. Wash the membrane in wash buffer three times for 10 minutes each.
9. Apply the diluted HRP conjugated secondary antibody in blocking buffer (as per manufacturers instructions) and incubate 1 hour at room temperature.
10. Wash the blot in wash buffer three times for 10 minutes each (this step can be repeated as required to reduce background).
11. Apply the detection reagent of choice in accordance with the manufacturers instructions.

Note: Tween-20 can be added to the blocking or antibody dilution buffer at a final concentration of 0.05-0.2%.

Immunohistochemistry-Paraffin protocol for HDAC5 Antibody (NBP2-22152)
HDAC5 Antibody:
Immunohistochemistry-Paraffin Embedded Sections

Antigen Unmasking:
Bring slides to a boil in 10 mM sodium citrate buffer (pH 6.0) then maintain at a sub-boiling temperature for 10 minutes. Cool slides on bench-top for 30 minutes.

Staining:
1. Wash sections in deionized water three times for 5 minutes each.
2. Wash sections in wash buffer for 5 minutes.
3. Block each section with 100-400 ul blocking solution for 1 hour at room temperature.
4. Remove blocking solution and add 100-400 ul diluted primary antibody. Incubate overnight at 4 C.
5. Remove antibody solution and wash sections in wash buffer three times for 5 minutes each.
6. Add 100-400 ul biotinylated diluted secondary antibody. Incubate 30 minutes at room temperature.
7. Remove secondary antibody solution and wash sections three times with wash buffer for 5 minutes each.
8. Add 100-400 ul Streptavidin-HRP reagent to each section and incubate for 30 minutes at room temperature.
9. Wash sections three times in wash buffer for 5 minutes each.
10. Add 100-400 ul DAB substrate to each section and monitor staining closely.
11. As soon as the sections develop, immerse slides in deionized water.
12. Counterstain sections in hematoxylin.
13. Wash sections in deionized water two times for 5 minutes each.
14. Dehydrate sections.
15. Mount coverslips.

Immunocytochemistry/Immunofluorescence protocol for HDAC5 Antibody (NBP2-22152)
HDAC5 Antibody:
Immunocytochemistry Protocol

Culture cells to appropriate density in 35 mm culture dishes or 6-well plates.

1. Remove culture medium and add 10% formalin to the dish. Fix at room temperature for 30 minutes.
2. Remove the formalin and add ice cold methanol. Incubate for 5-10 minutes.
3. Remove methanol and add washing solution (i.e. PBS). Be sure to not let the specimen dry out. Wash three times for 10 minutes.
4. To block nonspecific antibody binding incubate in 10% normal goat serum from 1 hour to overnight at room temperature.
5. Add primary antibody at appropriate dilution and incubate at room temperature from 2 hours to overnight at room temperature.
6. Remove primary antibody and replace with washing solution. Wash three times for 10 minutes.
7. Add secondary antibody at appropriate dilution. Incubate for 1 hour at room temperature.
8. Remove antibody and replace with wash solution, then wash for 10 minutes. Add Hoechst 33258 to wash solution at 1:25,0000 and incubate for 10 minutes. Wash a third time for 10 minutes.
9. Cells can be viewed directly after washing. The plates can also be stored in PBS containing Azide covered in Parafilm (TM). Cells can also be cover-slipped using Fluoromount, with appropriate sealing.

*The above information is only intended as a guide. The researcher should determine what protocol best meets their needs. Please follow safe laboratory procedures.

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Products Related to NBP2-22152

NB800-PC1	HeLa Whole Cell Lysate
HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control

Limitations

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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