Product Datasheet

HCN1 Antibody
NBP1-20250-0.025ml

Unit Size: 0.025 ml

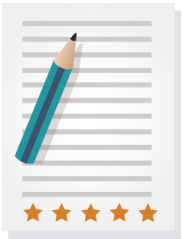
Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

www.novusbio.com technical@novusbio.com

Publications: 6

Protocols, Publications, Related Products, Reviews, Research Tools and Images at:
www.novusbio.com/NBP1-20250

Updated 9/9/2025 v.20.1



NBP1-20250-0.025ml

HCN1 Antibody

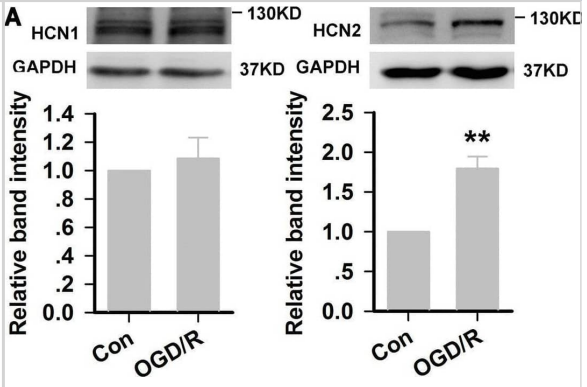
Product Information	
Unit Size	0.025 ml
Concentration	This product is unpurified. The exact concentration of antibody is not quantifiable.
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	No Preservative
Reconstitution Instructions	Reconstitute in 0.1 ml of sterile water. Centrifuge to remove any insoluble material. Glycerol may be added (1:1) for additional stability. Please note the sample size is provided in reconstituted format.
Isotype	IgG
Purity	Unpurified
Buffer	Lyophilized from whole antisera

Product Description	
Description	Novus Biologicals Sheep HCN1 Antibody (NBP1-20250) is a polyclonal antibody validated for use in IHC, WB and ICC/IF. Anti-HCN1 Antibody: Cited in 6 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Sheep
Gene ID	348980
Gene Symbol	HCN1
Species	Human, Mouse, Rat
Immunogen	A synthetic peptide from cytoplasmic region of human HCN1 conjugated to an immunogenic carrier protein was used as the immunogen. The antigen is homologous in many species including mouse and rat.

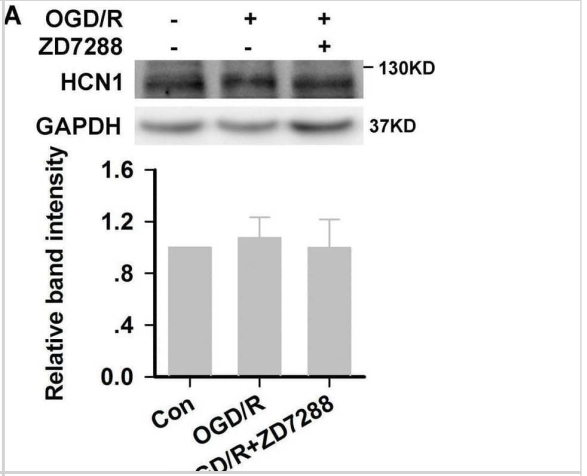
Product Application Details	
Applications	Western Blot, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry
Recommended Dilutions	Western Blot 1:300-1:2000, Immunohistochemistry 1:300-1:2000, Immunocytochemistry/ Immunofluorescence
Application Notes	Immunohistochemistry and Western Blot. Although not tested this antibody may be useful in Immunohistochemistry-Paraffin/Frozen. Use in Immunocytochemistry/immunofluorescence reported in scientific literature (PMID:31923455).

Images

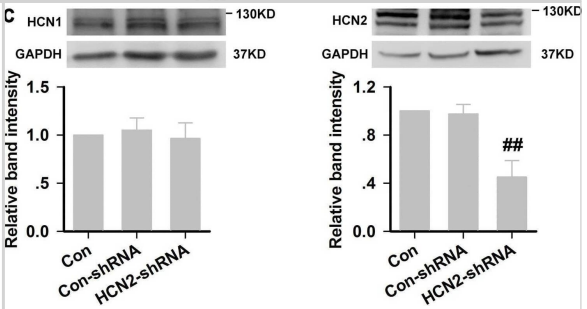
HCN2 subunit knockdown in rat hippocampal CA1 region. A HCN1 and HCN2 expression in CA1 after TGCI (experiments were performed at least four times with similar results). B Distribution of lentivirus in the dorsal hippocampal CA1 region (green; × 40, × 100, scale bars, 100 μm). C Relative expression of HCN1 and HCN2 channels at the protein level in Con-shRNA and HCN2-shRNA rats (experiments were performed at least four times with similar results). **P < 0.01 versus Con group; ##P < 0.01 versus Con-shRNA group. Image collected and cropped by CiteAb from the following open publication (https://pubmed.ncbi.nlm.nih.gov/32519067), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



HCN2 subunit knockdown in HT22 neurons. A HCN1 and HCN2 expression in HT22 neurons after OGD/R injury (experiments were performed at least four times with similar results). B Representative photomicrographs of fluorescence produced by EGFP and immunohistochemical staining with anti-HCN2 antibody in HT22 neurons (× 200, scale bar, 200 μm). C Quantitative analysis of HCN2 immunoreactivity (experiments were performed at least three times with similar results). D Relative expression of HCN1 and HCN2 channels at the protein level in Con-shRNA and HCN2-shRNA cells (experiments were performed at least four times with similar results) **P < 0.01 versus control group; ##P < 0.01 versus Con-shRNA group. Image collected and cropped by CiteAb from the following open publication (https://pubmed.ncbi.nlm.nih.gov/32519067), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



HCN2 subunit knockdown in rat hippocampal CA1 region. A HCN1 and HCN2 expression in CA1 after TGCI (experiments were performed at least four times with similar results). B Distribution of lentivirus in the dorsal hippocampal CA1 region (green; × 40, × 100, scale bars, 100 μm). C Relative expression of HCN1 and HCN2 channels at the protein level in Con-shRNA and HCN2-shRNA rats (experiments were performed at least four times with similar results). **P < 0.01 versus Con group; ##P < 0.01 versus Con-shRNA group. Image collected and cropped by CiteAb from the following open publication (https://pubmed.ncbi.nlm.nih.gov/32519067), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Publications

Luo P, Fu X, Chang M et al. Cerebral ischemia-reperfusion causes a down regulation of HCN1 expression via enhancing the nuclear NRSF-HDAC4 gathering that contributes to neuron damage Brain Res. Bull. 2020-01-07 [PMID: 31923455] (ICC/IF, WB, Rat)

Zhou M, Lin K, Si Y et al. Downregulation of HCN1 channels in hippocampus and prefrontal cortex in methamphetamine re-exposed mice with enhanced working memory Physiol Res 2018-10-23 [PMID: 30433806] (WB, Mouse)

Luo P, Chen C, Lu Y et al. Baclofen ameliorates spatial working memory impairments induced by chronic cerebral hypoperfusion via up-regulation of HCN2 expression in the PFC in rats. Behav. Brain Res. 2016-04-13 [PMID: 27085590] (WB, Rat)

Luo P, Lu Y, Li C et al. Long-lasting spatial learning and memory impairments caused by chronic cerebral hypoperfusion associate with a dynamic change of HCN1/HCN2 expression in hippocampal CA1 region. Neurobiol Learn Mem 2015-05-28 [PMID: 26021557]

Zhou M, Luo P, Lu Y et al. Imbalance of HCn1 and HCn2 expression in hippocampal CA1 area impairs spatial learning and memory in rats with chronic morphine exposure. Prog. neuropsychopharmacol. Biol. Psychiatry. 2014-10-07 [PMID: 25301101] (WB, Rat)

Li CJ, Lu Y, Zhou M et al. Activation of GABAB Receptors Ameliorates Cognitive Impairment via Restoring the Balance of HCN1/HCN2 Surface Expression in the Hippocampal CA1 Area in Rats With Chronic Cerebral Hypoperfusion. Mol. Neurobiol. 2014-05-18 [PMID: 24838625] (WB, Rat)

Novus Biologicals USA
10730 E. Briarwood Avenue
Centennial, CO 80112
USA
Phone: 303.730.1950
Toll Free: 1.888.506.6887
Fax: 303.730.1966
nb-customerservice@bio-techne.com

Bio-Techne Canada
21 Canmotor Ave
Toronto, ON M8Z 4E6
Canada
Phone: 905.827.6400
Toll Free: 855.668.8722
Fax: 905.827.6402
canada.inquires@bio-techne.com

Bio-Techne Ltd
19 Barton Lane
Abingdon Science Park
Abingdon, OX14 3NB, United Kingdom
Phone: (44) (0) 1235 529449
Free Phone: 0800 37 34 15
Fax: (44) (0) 1235 533420
info.EMEA@bio-techne.com

General Contact Information
www.novusbio.com
Technical Support: nb-technical@bio-techne.com
Orders: nb-customerservice@bio-techne.com
General: novus@novusbio.com

Products Related to NBP1-20250-0.025ml

NBP2-33376H	Blue Marker Antibody (6F4-F6) [HRP]
HAF016	Donkey anti-Sheep IgG Secondary Antibody [HRP]
NL010	Donkey anti-Sheep IgG Secondary Antibody [NL557]
NBP1-97055-10mg	Sheep 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.

For more information on our 100% guarantee, please visit www.novusbio.com/guarantee

Earn gift cards/discounts by submitting a review: www.novusbio.com/reviews/submit/NBP1-20250

Earn gift cards/discounts by submitting a publication using this product: www.novusbio.com/publications