

# Product Datasheet

## NF-H Antibody NB300-135

Unit Size: 0.05 ml

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

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Updated 9/9/2025 v.20.1

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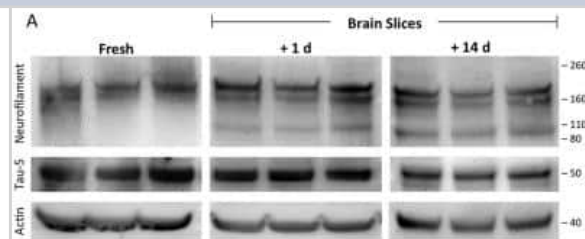
**NB300-135**

## NF-H Antibody

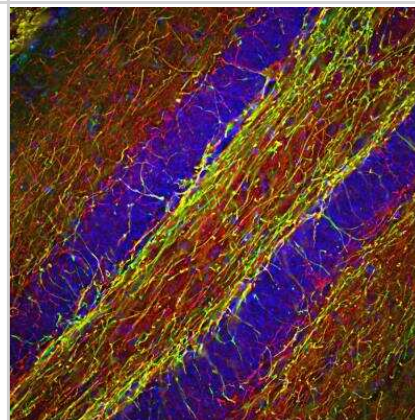
Product Information	
<b>Unit Size</b>	0.05 ml
<b>Concentration</b>	This product is unpurified. The exact concentration of antibody is not quantifiable.
<b>Storage</b>	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
<b>Clonality</b>	Polyclonal
<b>Preservative</b>	0.035% Sodium Azide
<b>Isotype</b>	IgG
<b>Purity</b>	Unpurified
<b>Buffer</b>	Supplied as serum
<b>Target Molecular Weight</b>	210 kDa
Product Description	
<b>Description</b>	Novus Biologicals Rabbit NF-H Antibody (NB300-135) is a polyclonal antibody validated for use in IHC, WB, ELISA and ICC/IF. Anti-NF-H Antibody: Cited in 29 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
<b>Host</b>	Rabbit
<b>Gene ID</b>	4744
<b>Gene Symbol</b>	NEFH
<b>Species</b>	Human, Mouse, Rat, Porcine, Bovine, Equine
<b>Marker</b>	Neuronal Marker
<b>Specificity/Sensitivity</b>	Phosphorylated and non-phosphorylated forms of 200kDa Neurofilament Heavy
<b>Immunogen</b>	Purified bovine Neurofilament Heavy protein.
Product Application Details	
<b>Applications</b>	Western Blot, Immunohistochemistry-Paraffin, ELISA, Immunocytochemistry/Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, In vitro assay, Immunohistochemistry Whole-Mount
<b>Recommended Dilutions</b>	Western Blot 1:10000-1:25000, ELISA 1:100-1:2000, Immunohistochemistry 1:1000-1:5000, Immunocytochemistry/ Immunofluorescence 1:1000-1:5000, Immunohistochemistry-Paraffin 1:1000-1:5000, Immunohistochemistry-Frozen 1:1000-1:5000, In vitro assay, Immunohistochemistry Whole-Mount
<b>Application Notes</b>	This 200kDa Neurofilament Heavy Antibody is useful for WB, ICC/IF, ELISA and IHC-P, IHC-Frozen. In WB a band can be seen at around 200kDa corresponding to rodent Neurofilament Heavy. In larger species such as porcine or human, Neurofilament Heavy runs a little slower and can be seen around 210-220kDa. 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. Use in In vitro assay reported in scientific literature (PMID 27789413). Use in IHC-WhMt reported in scientific literature (PMID:33499508)

## Images

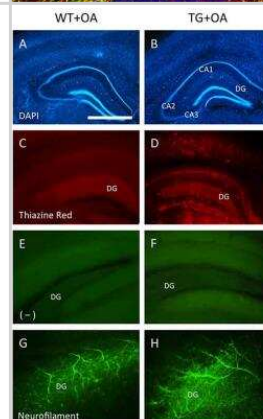
Western Blot: NF-H Antibody [NB300-135] - Proof of viability of organotypic adult brain slices. Brain slices of adult 9 month old wildtype (WT) mice were dissected fresh or incubated for either 1 day or for 14 days to examine vitality of slices (A). Brain slices were subsequently analyzed by Western blot using antibodies against Neurofilament-200 kDa, total tau (Tau-5) and actin served as a control. Size markers are given as kDa on the right side. Note some degradation of neurofilament but stability of Tau-5. Image collected and cropped by CiteAb from the following publication (<https://journal.frontiersin.org/article/10.3389/fnagi.2018.00113/full>) licensed under a CC-BY license.



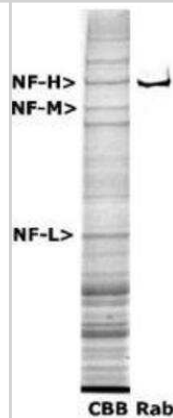
Immunohistochemistry: NF-H Antibody [NB300-135] - Mouse hippocampus section stained with rabbit pAb to NF-H, dilution 1:2,000 in red, and costained with mouse mAb to myelin basic protein (MBP), dilution 1:5,000 in green. The blue is DAPI staining of nuclear DNA. Following transcardial perfusion with 4% paraformaldehyde, brain was post fixed for 24 hours, cut to 45uM, and free-floating sections were stained with above antibodies. The NF-H antibody labels a network of axons of different neurons, while the MBP antibody stains myelin sheath around these axons.



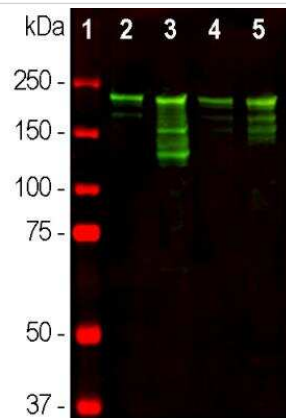
Immunohistochemistry: NF-H Antibody [NB300-135] - Immunostainings of adult organotypic brain slices at the hippocampal level. Brain slices were prepared from WT or TG adult mice and incubated with okadaic acid (OA). Brain slices were stained for nuclear DAPI (blue, A,B) showing intact brain structures. Thiazine Red staining (C,D) shows red fluorescent plaques in the hippocampus (D) of TG mice, while only background is seen in the hippocampus (C) of WT mice. Staining of neurofilament fibers (G,H) shows good neuronal viability both in WT and TG mice. Image collected and cropped by CiteAb from the following publication (<https://journal.frontiersin.org/article/10.3389/fnagi.2018.00113/full>) licensed under a CC-BY license.



Western Blot: NF-H Antibody [NB300-135] - Analysis of 200kDa Neurofilament Heavy expression in rat spinal cord extract. The first lane is Coomassie Brilliant Blue stained and the second lane is probed with rabbit anti-Neurofilament Heavy antibody NB300-135. The NF-H corresponds to a weight of 200kDa.



Western Blot: NF-H Antibody [NB300-135] - Different tissue lysates using rabbit pAb to NF-H, dilution 1:10,000 in green: [1] protein standard (red), [2] rat brain, [3] rat spinal cord [4] mouse brain, and [5] mouse spinal cord lysate. Strong band at about 220 kDa corresponds to the phosphorylated axonal form of the NF-H subunit. Smaller proteolytic fragments of NF-H are also detected with RPCA-NF-H antibody.



## Publications

Donnelly CR, Kumari A, Li L et al. Probing the multimodal fungiform papilla: complex peripheral nerve endings of chorda tympani taste and mechanosensitive fibers before and after Hedgehog pathway inhibition *Cell and Tissue Research* 2022-02-01 [PMID: 34859291] (Western Blot, Human)

Korde DS, Humpel C. Spreading of P301S Aggregated Tau Investigated in Organotypic Mouse Brain Slice Cultures *Biomolecules* 2022-08-23 [PMID: 36139003] (Western Blot, Human)

Lee JI, Gurjar AA, Talukder MAH et al. A novel nerve transection and repair method in mice: histomorphometric analysis of nerves, blood vessels, and muscles with functional recovery *Scientific reports* 2020-12-10 [PMID: 33303798] (Western Blot, Human)

Singh I, Kim J, Touhidul Islam SM et al. The role of S-nitrosoglutathione reductase (GSNOR) in T cell-mediated immunopathology of experimental autoimmune encephalomyelitis (EAE) *Neuroscience* 2024-11-10 [PMID: 39532197]

Jia X, Liu X, Zhu T et al. Infiltrated Macrophages Aggravate TMJOA Chronic Pain Via Piezo2 in IB4 -TG Neurons *papers.ssrn.com* 2023-11-28 (IHC-Fr, Rat)

Wei SY, Chen PY, Hsieh CC et al. Engineering large and geometrically controlled vascularized nerve tissue in collagen hydrogels to restore large-sized volumetric muscle loss *Biomaterials* 2023-12-01 [PMID: 37988898] (IHC-P, Mouse)

Lee JI, Talukder MAH, Karuman Z et al. Functional recovery and muscle atrophy in pre-clinical models of peripheral nerve transection and gap-grafting in mice: effects of 4-aminopyridine *Neural regeneration research* 2023-02-01 [PMID: 35900443] (IHC-WhMt, Mouse)

Kumari A, Li L, Ermilov AN et al. Unique lingual expression of the Hedgehog pathway antagonist Hedgehog-interacting protein in filiform papillae during homeostasis and ectopic expression in fungiform papillae during Hedgehog signaling inhibition *Developmental dynamics : an official publication of the American Association of Anatomists* 2022-07-01 [PMID: 35048440] (IHC, Mouse)

Manto KM, Govindappa PK, Martinazzi B et al. Erythropoietin-PLGA-PEG as a local treatment to promote functional recovery and neurovascular regeneration after peripheral nerve injury *Journal of nanobiotechnology* 2022-10-28 [PMID: 36307805] (WB)

Manto KM, Govindappa PK, Parisi D Et al. (4-Aminopyridine)PLGAPEG as a Novel Thermosensitive and Locally Injectable Treatment for Acute Peripheral Nerve Injury *ACS Appl Bio Mater* 2021-06-18 [PMID: 34142019]

Jiang H, Xu L, Liu W et al. The peripheral and central expression of CGRP and IB4 in chronic pain from MIA-induced TMJOA rats *Cell Mol Neurobiol* 2021-01-02 [PMID: 33387118]

Ucar B, Stefanova N, Humpel C Spreading of Aggregated alpha-Synuclein in Sagittal Organotypic Mouse Brain Slices *Biomolecules* 2022-01-19 [PMID: 35204664] (WB, Mouse)

More publications at <http://www.novusbio.com/NB300-135>



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### **Products Related to NB300-135**

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NBP2-33376H	Blue Marker Antibody (6F4-F6) [HRP]
HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control

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### **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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