Product Datasheet

NF-L Antibody
NB300-131

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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Publications: 10

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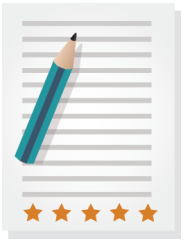
Updated 4/21/2024 v.20.1



NB300-131

NF-L Antibody

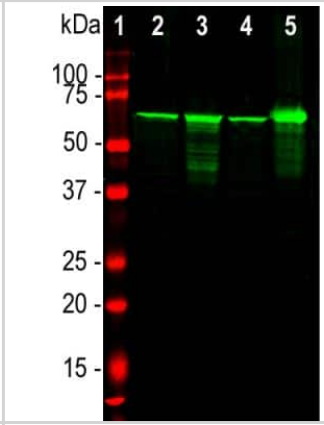
Product Information	
Unit Size	0.05 ml
Concentration	This product is unpurified. The exact concentration of antibody is not quantifiable.
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	5mM Sodium Azide
Isotype	IgG
Purity	Unpurified
Buffer	Supplied as serum
Target Molecular Weight	68 kDa

Product Description	
Host	Rabbit
Gene Symbol	NEFL
Species	Human, Mouse, Rat, Porcine, Bovine
Marker	Neuronal Marker
Specificity/Sensitivity	Specifically recognizes the light neurofilament subunit (~68 kDa).
Immunogen	Native Neurofilament Light protein purified from pig spinal cord [UniProt# P02547]

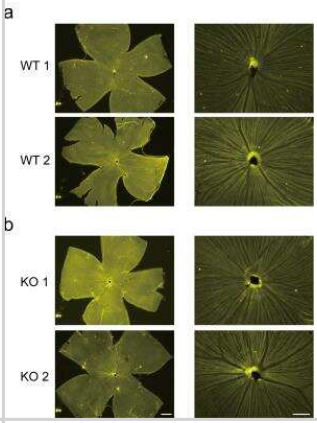
Product Application Details	
Applications	Western Blot, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin, Knockout Validated
Recommended Dilutions	Western Blot 1:10000-1:15000, Immunohistochemistry 1:5000, Immunocytochemistry/ Immunofluorescence 1:500-1:5000, Immunohistochemistry-Paraffin 1:5000, Knockout Validated
Application Notes	This 68kDa Neurofilament Light antibody is useful in Immunocytochemistry/Immunofluorescence, Immunohistochemistry paraffin embedded sections and Western blot. 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

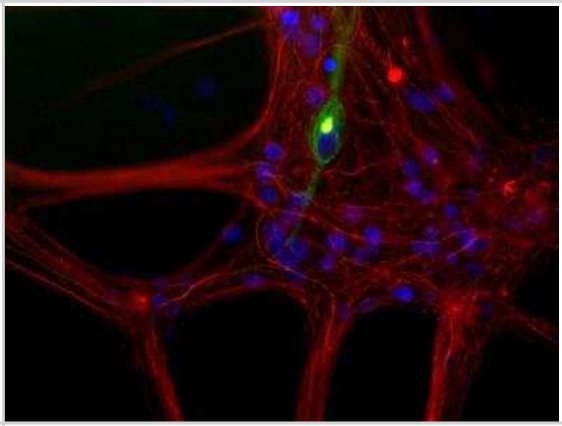
Western Blot: NF-L Antibody [NB300-131] - Analysis of different tissue lysates using rabbit pAb to NF-L, NB300-131, dilution 1:20,000. in green. [1] protein standard (red), [2] rat brain, [3] rat spinal cord, [4] mouse brain, [5] mouse spinal cord. The strong band at 68kDa corresponds to the NF-L protein.



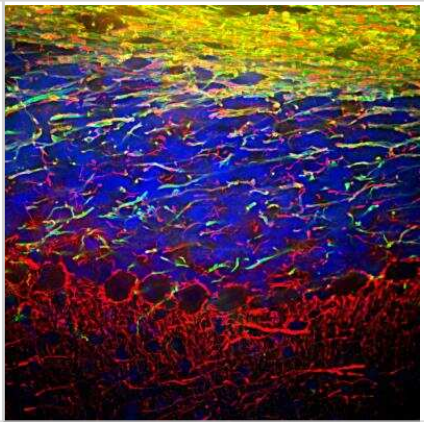
Immunocytochemistry/Immunofluorescence: NF-L Antibody [NB300-131] - Neurofilament (NF-L antibody) used as axon marker in WT and KO mice using immunofluorescence staining to illustrate the axon morphology of retinal ganglion cells. Central part of retina is enlarged and displayed in WT and KO mice. Scale bars are 500 micrometers for left and 200 micrometers for right. Citation: Lin Y-S, Kuo K-T, Chen S-K, Huang H-S (2018) RBFOX3/NeuN is dispensable for visual function. PLoS ONE 13(2): e0192355. https://doi.org/10.1371/journal.pone.0192355



Immunocytochemistry/Immunofluorescence: 68kDa Neurofilament Light Antibody [NB300-131] - Mixed neuron/glia cultures from newborn rat brain stained with NB300-220 antibody to peripherin (green) and rabbit polyclonal antibody to NF-L RPCA-NF-L (red channel). A class of large neurons, like the one in the middle of this image, contain peripherin, while the majority of neurons and their processes contain NF-L and not peripherin. Interestingly, the periperin positive cells often contain a cytoplasmic inclusion next to the nucleus which stains for both peripherin and NF-L, and so appears golden in this kind of image. The blue channel reveals the localization of DNA



Immunocytochemistry/Immunofluorescence: NF-L Antibody [NB300-131] - Analysis of mouse cerebellum section stained with rabbit pAb to NF-L, NB300-131, dilution 1:5,000 in red, and costained with chicken pAb to MBP, dilution 1:5,000, in green. Following transcardial perfusion of mouse with 4% paraformaldehyde, brain was post fixed for 24 hours, cut to 45uM, and free-floating sections were stained with above antibodies. NB300-131 antibody labels dendrites and axons of neuronal cells, and MBP antibody stains the network of myelin sheathes around axons.



Publications

Lai CF, Shen J, Balic A et al. Nogo-A Regulates the Fate of Human Dental Pulp Stem Cells toward Osteogenic, Adipogenic, and Neurogenic Differentiation Cells 2022-10-28 [PMID: 36359811] (ICC/IF)

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]

Lin YS, Kuo KT, Chen SK, Huang HS. RBFOX3/NeuN is dispensable for visual function. PLoS ONE. 2018-02-05 [PMID: 29401485] (ICC/IF, Mouse)

Wang HY, Hsieh PF, Huang DF et al. RBFOX3/NeuN is Required for Hippocampal Circuit Balance and Function. Sci Rep. 2015-12-01 [PMID: 26619789] (WB, Mouse)

Huang TN, Chuang HC, Chou WH et al. Tbr1 haploinsufficiency impairs amygdalar axonal projections and results in cognitive abnormality. Nat. Neurosci. 2014-02-01 [PMID: 24441682] (WB, Mouse)

From R, Eilam R, Bar-Lev DD et al. Oligodendrogenesis and myelinogenesis during postnatal development effect of glatiramer acetate. Glia 2014-02-13 [PMID: 24481644] (IHC-P, Mouse)

Shim JH, Cho SA, Seo MJ et al. Proteomic analysis of time-dependent difference of protein expression profile changes during neuronal differentiation of mouse embryonic stem cells. Mol Cells. 2010-03-01 [PMID: 20112072] (ICC/IF, Mouse)

Liu HX, Ermilov A, Grachtchouk M et al. Multiple Shh signaling centers participate in fungiform papilla and taste bud formation and maintenance. Dev Biol 2013-08-02 [PMID: 23916850] (IF/IHC, Mouse)

King AE, Dickson TC, Blizzard CA et al. Neuron-glia interactions underlie ALS-like axonal cytoskeletal pathology Neurobiol Aging 2011-03-01 [PMID: 19427060] (ICC/IF, IF/IHC, Mouse)

Yokoyama K, Tezuka T, Kotani M a phosphoprotein family that links PI3K to WAVE1 signalling in neurons. The EMBO Journal. 2011-09-23 [PMID: 21946561]

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Products Related to NB300-131

NBL1-13577	NF-L Overexpression 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

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