

Anti-NEFH Antibody (Monoclonal, N52)

Catalog Number: MA1071

About Nefh

Neurofilaments are composed of 3 neuron-specific proteins with apparent molecular masses of 68 kD (NFL), 125 kD (NFM), and 200 kD (NFH) on SDS-gel electrophoresis. Genomic clones for the largest human neurofilament protein (NF-H) were isolated, the intron/exon boundaries mapped and the entire protein-coding regions (exons) sequenced. mutations in neurofilaments have been linked to some forms of Charcot-Marie-Tooth disease (CMT).

Overview

Product Name	Anti-NEFH Antibody (Monoclonal, N52)
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-NEFH Antibody (Monoclonal, N52) catalog # MA1071. Tested in IHC, WB applications. This antibody reacts with Human, Mouse, Rat.
Application	IHC, WB
Clonality	Monoclonal N52
Formulation	Mouse ascites fluid, 1.2% sodium acetate, 2mg BSA, with 0.01mg NaN ₃ as preservative.
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Mouse
Uniprot ID	P16884

Technical Details

Immunogen	C-terminal segment of enzymatically dephosphorylated pig Neurofilament 200.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Mouse IgG (EK1001) for Western blot, and HRP Conjugated anti-Mouse IgG Super Vision Assay Kit (SV0001-1) for IHC(P) and IHC(F).
Cross Reactivity	No cross reactivity with other proteins
Isotype	Mouse IgG1

Form	Lyophilized
Concentration	Adding 1 ml of PBS buffer will yield a concentration of 100 µg/ml.
Purification	Ascites
Suggested Dilutions	<p>Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.</p> <p>If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.</p> <p>Some PubMed article(s) citing the expression level of this target are as follows: Boster Bio's internal QC testing used Immunohistochemistry (Paraffin-embedded Section), 1-2 µg/ml, Human, mouse, rat, By Heat Immunohistochemistry (Frozen Section), 1-2 µg/ml, Human, mouse, rat, - Western blot, 0.5ml, Human, mouse, rat</p> <p>For protocols please visit https://www.bosterbio.com/protocol-and-troubleshooting/</p>

Anti-NEFH Antibody (Monoclonal, N52) (MA1071) Images

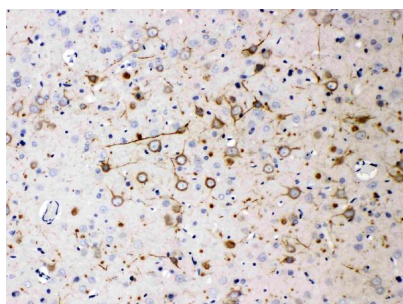


Figure 1. IHC analysis of NEFH using anti-NEFH antibody (MA1071).

NEFH was detected in paraffin-embedded section of rat brain tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1µg/ml mouse anti-NEFH Antibody (MA1071) overnight at 4°C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1021) with DAB as the chromogen.

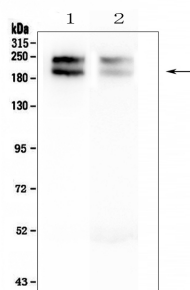


Figure 2. Western blot analysis of NEFH using anti-NEFH antibody (MA1071).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50µg of sample under reducing conditions.

Lane 1: rat brain tissue lysates,
 Lane 2: mouse brain tissue lysates.

After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5

hour at RT. The membrane was incubated with mouse anti-NEFH antigen affinity purified monoclonal antibody (Catalog # MA1071) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-mouse IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1001) with Tanon 5200 system. A specific band was detected for NEFH at approximately 200KD. The expected band size for NEFH is at 112KD.

12 Publications Citing This Product

1. PubMed ID: 33285262, Wu K, Yue J, Shen K, He J, Zhu G, Liu S, Zhang C, Yang H. Increased Expression of Fibroblast Growth Factor 13 in Cortical Lesions of the Focal Cortical Dysplasia. Brain Res Bull. 2020 Dec 4;50361-9230(20)30710-3.doi: 10.1016/j.brainresbull.2020.11.023.Epub ahead
2. PubMed ID: 28714852, Trimebutine, a small molecule mimetic agonist of adhesion molecule L1, contributes to functional recovery after spinal cord injury in mice
3. PubMed ID: 27765894, MicroRNA-30b regulates expression of the sodium channel Nav17 in nerve injury-induced neuropathic pain in the rat

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