

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 NaN3 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.
Predicted Reactive Species	Monkey
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 ug/ml.
Purification	Ascites

Suggested Dilutions

Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.

If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.

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), 1-2ug/ml, Human, mouse, rat, By Heat

Immunohistochemistry (Frozen Section), 1-2ug/ml, Human, mouse, rat, -

Western blot, 0.5ml, Human, mouse, rat

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

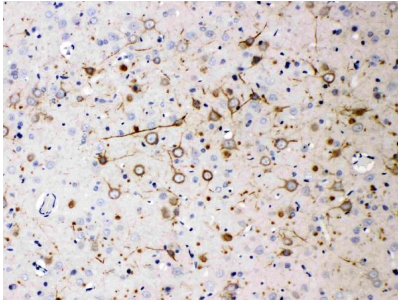


Figure 1. IHC analysis of NEFH using anti-NEFH antibody (MA1071).

NEFH was detected in paraffin-embedded section of rat brain tissues. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml mouse anti-NEFH Antibody (MA1071) overnight at 4°C. Peroxidase Conjugated 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.

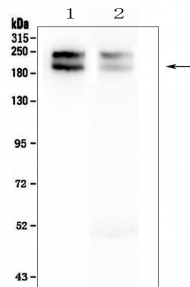


Figure 2. Western blot analysis of NEFH using anti-NEFH antibody (MA1071).

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 50ug 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.

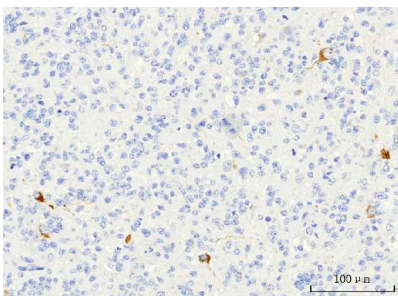


Figure 3. IHC analysis of NEFH using anti-NEFH antibody (MA1071).

NEFH was detected in paraffin-embedded section of human glioma tissues. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml mouse anti-NEFH Antibody (MA1071) overnight at 4°C. Peroxidase Conjugated 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.

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;S0361-9230(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

Visit bosterbio.com/anti-nefh-antibody-monoclonal-ma1071-boster.html to see all 12 publications.

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