

## Basic Information

|                           |  |  |
|---------------------------|--|--|
| <b>Product Name</b>       | Anti-NF-H/NF200/NEFH Antibody  |  |
| <b>Gene Name</b>          | Nefh   |  |
| <b>Source</b>             | Rabbit   |  |
| <b>Clonality</b>          | Polyclonal   |  |
| <b>Isotype</b>            | IgG  |  |
| <b>Species Reactivity</b> | mouse, rat   |  |
| <b>Tested Application</b> | WB, IHC, FCM, ELISA  |  |
| <b>Contents</b>           | 500 ug/ml antibody with PBS, 0.02% NaN <sub>3</sub> , 1 mg/ml BSA and 50% glycerol.  |  |
| <b>Immunogen</b>          | E.coli-derived mouse Nefh recombinant protein (Position: Y109-E466).   |  |
| <b>Concentration</b>      | 500 ug/ml  |  |
| <b>Purification</b>       | Immunogen affinity purified.   |  |
| <b>Observed MW</b>        | 117-220 kDa  |  |
| <b>Dilution Ratios</b>    | Western blot (WB): 1:500-2000<br>Immunohistochemistry (IHC): 1:50-400<br>Flow Cytometry (Fixed): 1:50-200<br>Enzyme linked immunosorbent assay (ELISA): 1:100-1000<br>(Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user. |  |

## Storage

12 months from date of receipt, -20°C as supplied.

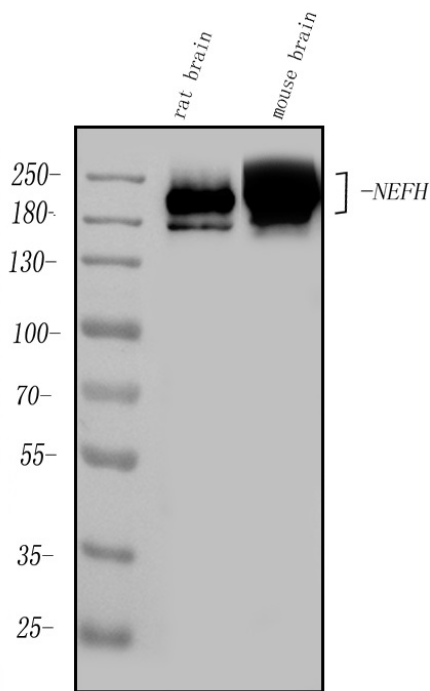
## Background Information

Neurofilaments are type IV intermediate filament heteropolymers composed of light, medium, and heavy chains. Neurofilaments comprise the axoskeleton and functionally maintain neuronal caliber. They may also play a role in intracellular transport to axons and dendrites. This gene encodes the heavy neurofilament protein. This protein is commonly used as a biomarker of neuronal damage and susceptibility to amyotrophic lateral sclerosis (ALS) has been associated with mutations in this gene.

## Reference

Anti-NF-H/NF200/NEFH Antibody被引用在28文献中。

## Selected Validation Data

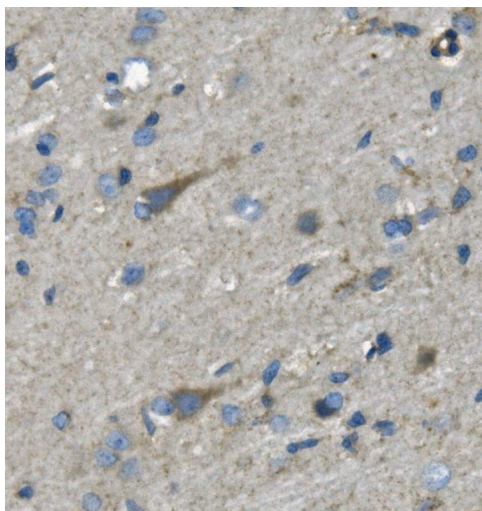


Western blot analysis of NF-H/NF200/NEFH using anti-NF-H/NF200/NEFH antibody (A05307). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: rat brain tissue lysates,

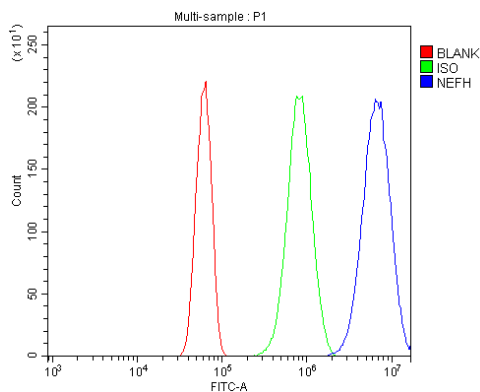
Lane 2: mouse brain tissue lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-NF-H/NF200/NEFH antigen affinity purified polyclonal antibody (A05307) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for NF-H/NF200/NEFH at approximately 117-220 kDa. The expected band size for NF-H/NF200/NEFH is at 117 kDa.



IHC analysis of NF-H/NF200/NEFH using anti-NF-H/NF200/NEFH antibody (A05307).

NF-H/NF200/NEFH was detected in a paraffin-embedded section of rat brain tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-NF-H/NF200/NEFH Antibody (A05307) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.



Flow Cytometry analysis of Neuro-2a cells using anti-NF-H/NF200/NEFH antibody (A05307).

Overlay histogram showing Neuro-2a cells stained with A05307 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-NF-H/NF200/NEFH Antibody (A05307) at 1:100 dilution for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.