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Neurofilament H (NF-H) Antibody
Mouse monoclonal antibody
Catalog # AN1145

Specification

Neurofilament H (NF-H) Antibody - Product Information

Application	**WB, IF**
Primary Accession	P12036
Reactivity	**Rat**
Predicted	**Human, Mouse**
Host	**Mouse**
Clonality	**monoclonal**
Isotype	**IgG1**
Calculated MW	**200 KDa**

Neurofilament H (NF-H) Antibody - Additional Information

Gene ID	**4744**
Gene Name	**NEFH**

Other Names
Neurofilament heavy polypeptide, NF-H, 200 kDa neurofilament protein, Neurofilament triplet H protein, NEFH, KIAA0845, NFH

Target/Specificity
Purified bovine NF-H.

Dilution
WB~~ 1:5000
IF~~ 1:500

Format
Unpurified mouse ascites fluid.

Antibody Specificity
Specific for the ~200k Neurofilament H protein. It recognizes phosphorylated NF-H KSP (lysine-serine-proline) type sequences. In some species there is some cross-reactivity with the related phosphorylated KSP sequences found in the related neurofilament subunit NF-M. It recognizes neurofilaments in frozen sections in tissue culture and in formalin fixed sections.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Neurofilament H (NF-H) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping
Blue Ice

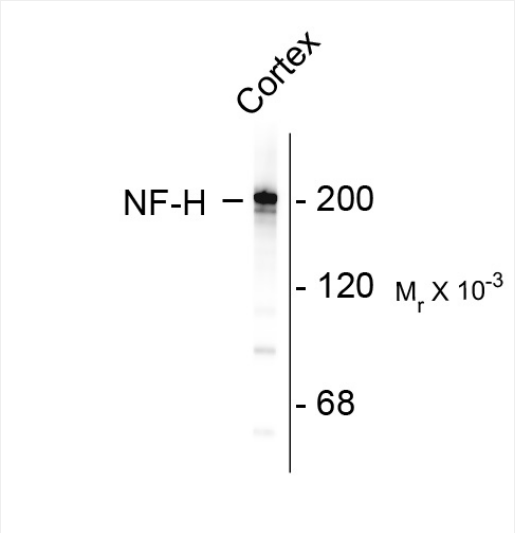
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Neurofilament H (NF-H) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Neurofilament H (NF-H) Antibody - Images



Western blot of rat cortex lysate showing specific immunolabeling of the ~ 200k NF-H protein.



Immunostaining of human cerebellar cortex showing labeling of NF-H (brown) in basket cell axons surrounding the large Purkinje neurons.

Neurofilament H (NF-H) Antibody - Background

Neurofilaments are the 10nm or intermediate filament proteins found specifically in neurons, and are composed predominantly of three major proteins called NF-L, NF-M and NF-H (1). NF-H is the neurofilament high or heavy molecular weight polypeptide and runs on SDS-PAGE gels at 200-220 kDa, with some variability across species boundaries. Antibodies to NF-H are useful for identifying

neuronal cells and their processes in tissue sections and in tissue culture. NF-H antibodies can also be useful to visualize neurofilament accumulations seen in many neurological diseases, such as Amyotrophic Lateral Sclerosis (Lou Gehrig's disease) (2) and Alzheimer's disease (3).

Neurofilament H (NF-H) Antibody - References

1.
Harris, J., Ayyub, C. and Shaw G. (1991) A molecular dissection of the carboxyterminal tails of the major neurofilament subunits NF-M and NF-H. J Neurosci Res 30:47-62.
2. Mendonca DM, Chimelli L, Martinez AM. (2005) Quantitative evidence for neurofilament heavy subunit aggregation in motor neurons of spinal cords of patients with amyotrophic lateral sclerosis. Braz J Med Biol Res. 38(6):925-933.
3.
Hu YY, He SS, Wang XC, Duan QH, Khatoon S, Igbal K, Grundke-Igbal I, Wang JZ (2002) Elevated levels of phosphorylated neurofilament proteins in cerebrospinal fluid of Alzheimer disease patients. Neurosci Lett 320(3):156-60.