

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

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**Neurofilament H (NF-H) Antibody - Product Information**

Application	WB, IF
Primary Accession	<a href="#">P12036</a>
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**

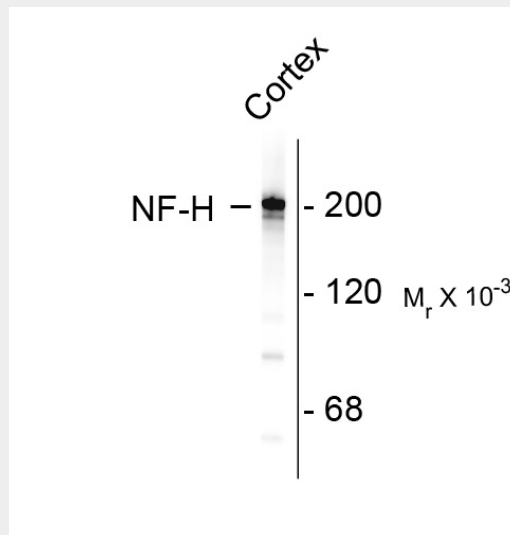
Blue Ice

## Neurofilament H (NF-H) Antibody - Protocols

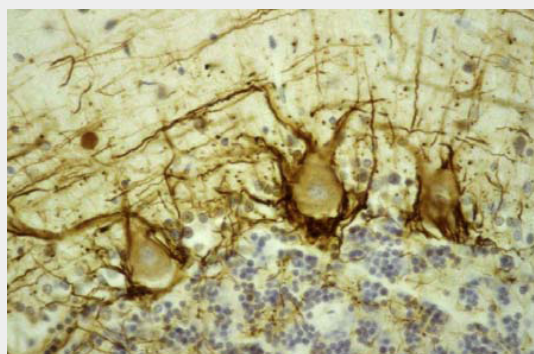
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [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.