

### Neurofilament M (NF-M) Antibody

Mouse monoclonal antibody Catalog # AN1148

### **Specification**

### Neurofilament M (NF-M) Antibody - Product Information

Application WB, IF
Primary Accession P12839
Reactivity Rat

Predicted Chicken, Human, Mouse

Host Mouse
Clonality monoclonal
Isotype IgG1
Calculated MW 145 KDa

### Neurofilament M (NF-M) Antibody - Additional Information

Gene ID 24588
Gene Name NEFM

**Other Names** 

Neurofilament medium polypeptide, NF-M, 160 kDa neurofilament protein, Neurofilament 3, Neurofilament triplet M protein, Nefm, Nef3, Nfm

### Target/Specificity

Preparation containing the extreme C-terminus expressed in and purified from E. Coli.

## **Dilution**

WB~~ 1:1000 IF~~ 1:100

### **Format**

Unpurified, concentrated culture supernatant.

# **Antibody Specificity**

Specific for the ~145k neurofilament M protein.

#### 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 M (NF-M) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## **Shipping**

Blue Ice

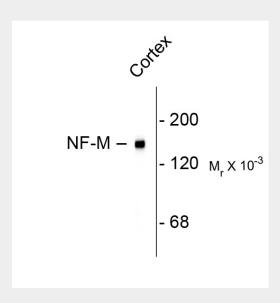
### Neurofilament M (NF-M) Antibody - Protocols



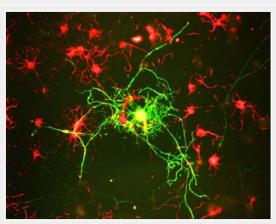
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

### Neurofilament M (NF-M) Antibody - Images



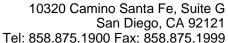
Western blot of rat cortex lysate showing specific immunolabeling of the ~ 145k NF-M protein.



Immunostaining of cultured rat neurons showing labeling of NF-M (green) in mature neurons.

## Neurofilament M (NF-M) 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-M is the neurofilament middle or medium molecular weight polypeptide and runs on SDS-PAGE gels at 145-160 kDa, with some variability across species boundaries. Antibodies to NF-M are useful for identifying neuronal cells and their processes in tissue sections and in tissue culture. NF-M antibodies can also be useful to visualize neurofilament accumulations seen in many neurological





diseases, such as Amyotrophic Lateral Sclerosis (Lou Gehrig's disease) and Alzheimer's disease (2).

## **Neurofilament M (NF-M) Antibody - References**

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.

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.