



# Neurofilament NF-L

# **Data Sheet**

Catalog Number: MO22193 Host: Mouse

Product Type: Mouse Monoclonal IgG Species
Reactivity: Human, Rat, Mouse, Cow, and Pig

Immunogen Format:

Sequence: C-terminal peptide of human NF-L protein, Purified antibody at 1mg/mL in 50% GEEEDTKESEEEKKEESAGEEQVAKKKD PBS, 50% glycerol plus 5mM NaN3

Applications: Immunohistochemistry: 1:1,000

Immunofluorescent: 1:1,000 Immunocytochemistry: 1:1,000

with an N-terminal C for coupling to KLH

Western Blot: 1:5.000

Dilutions listed as a recommendation. Optimal dilution should be determined by investigator.

Storage: Antibody can also be aliquotted and stored frozen at -20° C in a manual defrost freezer for six

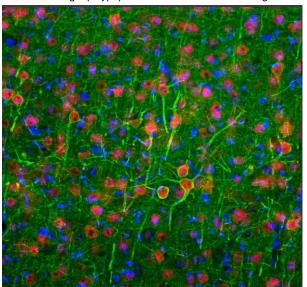
months without detectable loss of activity. The antibody can be stored at 2° - 8° C for 1 month

without detectable loss of activity. Avoid repeated freeze-thaw cycles.

### **Application Notes**

#### Description/Data:

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, though other filament proteins may be included also. The major function of neurofilaments is likely to control the diameter of large axons. NF-L is the neurofilament light or low molecular weight polypeptide and runs on SDS-PAGE gels at 68-70kDa with some variability across species. Antibodies to



NF-L like MCA-6H112 are useful for identifying neuronal cells and their processes in cell culture and sectioned material. NF-L antibody can also be useful for the visualization of neurofilament rich accumulations seen in many neurological diseases, such as Lou Gehrig's disease (ALS), giant axon neuropathy, Charcot-Marie Tooth disease and others. Much interest has recently been focused on the detection of NF-L released from neurons into blood and CSF as a surrogate marker of primarily axonal loss in a variety of types of CNS injury and degeneration.

Images: Immunofluorescent analysis of a rat frontal cortex section stained with mouse mouse monoclonal antibody to NF-L dilution 1:2,000 in green, and costained with rabbit polyclonal antibody to FOX3/NeuN dilution 1:2,000 in red.

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