

Product Data Sheet: Neurofilament Light (NF-L)

Cat. No: MAB-10582

Size: 100 ug

Clone: DA₂

Concentration: 1mg/ml

Host: Ms laG1k

Isotype:

Immunogen: Enzymatically dephosphorylated full length pig NF-L protein

Reactivity: Hu, Ms, Rt, Ct, Ch

Western Blot: 1:5,000 Immunohistochemistry: 1:1,000 Immunofluorescence: **Applications:**

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

Molecular Weight: 68kDa by SDSPAGE

Purification: Purified

> 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 DA2 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-

Background: 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. MAB-10582 antibody was made against a preparation of NF-L isolated from pig spinal cord. It binds NF-L from a variety of species including human, rat and mouse. We recently epitope mapped this antibody to a short peptide in the C-terminal "tail" region of the molecule, We recently epitope mapped this antibody to a short peptide in the C-terminal "tail" region of the molecule within the sequence SYYTSHVQEEQIEVEETIEA, amino acids 441-460 of

the human sequence

Form: Liquid

Buffer: Purified antibody at 1mg/mL in 50% PBS, 50% glycerol plus 5mM NaN3

Store at 4°C for short term, for longer term at -20°C. Storage:

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