NEUROMICS



Neurofilament NF-L

Data Sheet

Catalog Number: RA22138 Host: Rabbit

Product Type: Rabbit Polyclonal Species Reactivity: Human, Rat, Mouse, Cow, and Pig

Immunogen C-terminal peptide of rat NF-L protein, Format: Supplied as an aliquot of serum

Sequence: GEEEDTKESEEEKKEESAGEEQAAKKKD plus 5mM NaN₃ with an N-terminal Cys for coupling to KLH

Applications: Immunofluorescence: 1:5,000

Immunocytochemistry: 1:5,000 Western Blot: 1:10,000-15,000

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

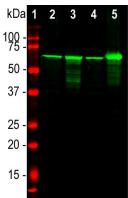
months without detectable loss of activity. The antibody can be stored at 2° - 8° C for 1 month

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

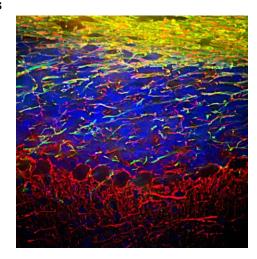
Application Notes

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 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: Immunofluorescent analysis of mouse cerebellum section stained with rabbit pAb to NF-L dilution 1:5,000 in red, and costained with chicken pAb to MBP dilution 1:5,000, in green. Western Blot: Western blot analysis of different tissue lysates using rabbit pAb to NF-L, dilution 1:20,000. in green. [1] protein standard (red), [2] rat brain, [3] rat spinal cord, [4] mouse brain, [5] mouse spinal cord. The strong band at 68kDa corresponds to the NF-L protein.

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