

## Product Data Sheet: Neurofilament Medium (NF-M)

Cat. No:

AB-11153

Size:
100 ul

Clone:
POLY

Concentration:
Img/ml

Host:
Rb

Isotype:
IgG

**Immunogen:**Recombinant fusion protein containing the extreme C-terminal segment of rat NF-

M, amino acids 549-845

**Reactivity:** Hu, Rt, Ms, Ct, cw, Pig,Rb

Western Blot: 1:1,000-5,000 Immunofluorescence: 1:1,000-1:2500.

**Applications:** Immunocytochemistry: 1:1,000-1:2500. Immunohistochemistry: 1:1,000-1:2500.

ABC: 1:5,000.

Molecular Weight: 145-160kDa

**Purification:** Serum

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. NF-M is the neurofilament middle or medium molecular weight polypeptide and runs on SDS-PAGE gels at 145-160kDa, with some species variability, though the real molecular weight is ~105kDa. The major function of neurofilaments is likely to control the diameter of large axons (1). Antibodies to NF-M such as NF-M are useful for identifying neuronal cells and their processes in tissue sections and in cell culture. NF-M antibodies can also be useful to visualize neurofilament rich accumulations seen in many neurological diseases, such as Amyotrophic Lateral Sclerosis (a.k.a. Lou Gehrig's disease) and Alzheimer's

**Background:** 

disease (2-4). Much recent evidence has suggested that the detection of NF-L and NF-H in blood and CSF might be a useful prognostic or diagnostic biomarkers of neuronal damage and degeneration associated with a variety of CNS pathologies (5,6). The potential utility of NF-M in this fashion has not to date been examined. The NF-M antibody was made against a recombinant fusion protein of E. coli TrpE fused to the C-terminus of rat NF-M, amino acids 677-845 (7). This region is very highly conserved in protein sequence across species boundaries and contains some interesting peptide repeats of currently unknown function (8). The NF-M antibody is very similar in properties to a rabbit polyclonal the production and characterization of which were described in reference 7.

Form: Liquid

**Buffer:** Supplied as an aliquot of serum plus 5mM NaN3

Storage: Storage for short term at 4°C recommended, for longer term at -20°C, minimize

freeze/thaw cycles.

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