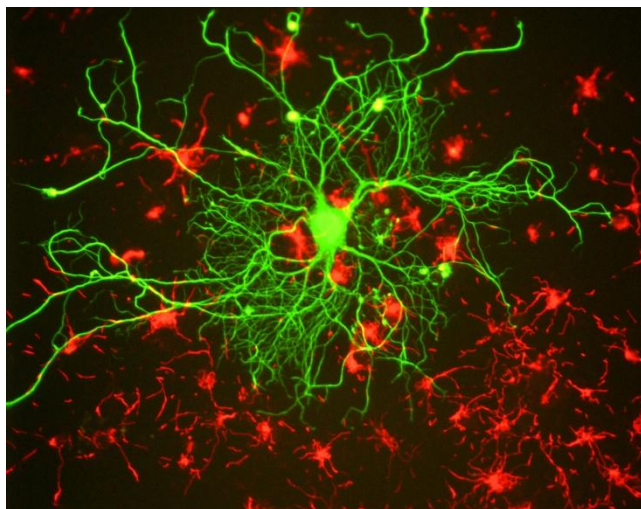
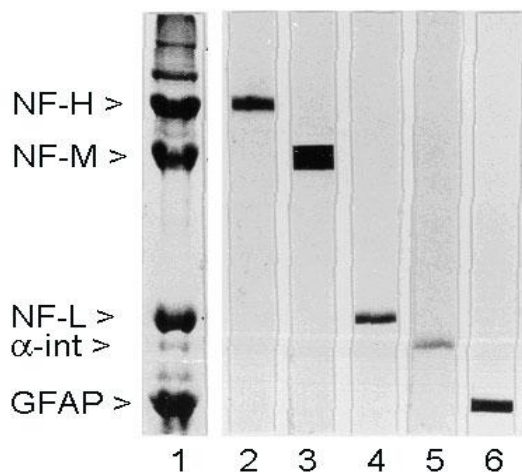


Catalogue# MCA-DA2: Neurofilament NF-L Monoclonal Antibody Clone DA2-AP

The Immunogen: [Neurofilaments](#) are the 10 nm 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-L is the neurofilament light or low molecular weight polypeptide and runs on SDS-PAGE gels at about 68 kDa. Antibodies to NF-L are useful for identifying neuronal cells and their processes in tissue sections and in tissue culture. NF-L antibody can also be useful in the diagnostics of neurofilament accumulations seen in many neurological diseases, such as Lou Gehrig's disease and Alzheimer's disease. Mutations in the protein coding region of the human NF-L gene cause some forms of Charcot-Marie-Tooth disease (1).

This antibody has been sold by Chemicon and Millipore for many years under the catalog number Mab1615, and has been used in numerous publications (2-6). The same antibody is also marketed, more expensively, by Abcam, Novus and many other companies.

We are OEM suppliers of this antibody- in other words we manufactured it, characterized it and generated the data presented on this page. This antibody is available from several other vendors, but we can supply it more cheaply and we can provide you with more detailed information on the properties of the antibody.



Left: Rat spinal cord homogenate showing the major intermediate filament proteins of the nervous system (lane 1). The remaining lanes show blots of this material stained with various antibodies including MCA-DA2 (lane 4). **Right:** Cells grown from adult rat brain using the method described by Evans et al. (4). Large cell in middle is stained with mouse monoclonal to NF-L clone DA2 (green). Another type of neuronal lineage cell was stained with our rabbit polyclonal to α -internexin, [RPCA-a-Int](#) (red). These cells were mitotic but had several characteristics of neurons.

Antibody characteristics: MCA-DA2 was raised against a preparation of enzymatically dephosphorylated pig neurofilaments including NF-L, NF-M and NF-H. Screening was by ELISA on the immunogen followed by immunofluorescence microscopy. Clones which revealed strong staining were further characterized biochemically. MCA-DA2 is a IgG1 class antibody with a κ light chain. It reacts with NF-L from human, cow, pig, mouse, rat and all other mammals, and also recognizes avian NF-L. It is strong and clean on western blots and works well on frozen sections, cells in tissue culture and on mildly formalin fixed histological sections.

Suggestions for use: For immunofluorescence, use purified MCA-DA2 at 1mg/mL diluted 1/500. For western blots try MCA-DA2 diluted 1/10,000 to 1:20,000. Store at 4°C short term or -20°C long term. Avoid repeated freezing and thawing.

Limitations: This product is for research use only and is not approved for use in humans or in clinical diagnosis.

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