## For Research Use Only

## NF-M Monoclonal antibody

Catalog Number: 66396-1-Ig



**Basic Information** 

Catalog Number: GenBank Accession Number:

66396-1-lg BC002421 Protein G purification GeneID (NCBI): Size:

150ul, Concentration: 1000 ug/ml by 4741 2E3B12

Nanodrop and 1000 ug/ml by Bradford<sub>UNIPROT ID:</sub> Recommended Dilutions: method using BSA as the standard; P07197 WB: 1:2000-1:20000 Source: IHC: 1:200-1:2000 Full Name:

Mouse neurofilament, medium polypeptide

Isotype: Calculated MW: lgG1 102 kDa Immunogen Catalog Number: Observed MW: AG22709 140 kDa

CloneNo.:

**Purification Method:** 

FC (Intra): 0.40 ug per 10^6 cells in a

100 µl suspension

**Applications** 

**Tested Applications:** 

WB, IHC, FC (Intra), ELISA

Species Specificity:

human, mouse, rat

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate

buffer pH 6.0

Positive Controls:

WB: rat brain tissue, rat brain, mouse brain tissue, PC-

12 cells

IHC: mouse brain tissue, mouse cerebellum tissue, rat

brain tissue

FC (Intra): PC-12 cells,

## **Background Information**

NEFM, also named as NEF3 and NFM, belongs to the intermediate filament family. Neurofilaments are the 10 nm intermediate filaments found specifically in neurons. They are a major component of the cell's cytoskeleton, and provide support for normal axonal radial growth. Neurofilaments usually contain three intermediate filament proteins: L, M, and H which are involved in the maintenance of neuronal caliber. The names given to the three major neurofilament subunits are based upon the apparent molecular weight of the mammalian subunits on SDS-PAGE: NF-L, 65-68 kDa; NF-M,140-160 kDa and NF-H, 200-220 kDa.

Storage

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

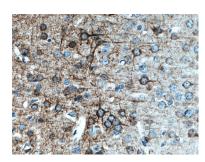
\*\*\* 20ul sizes contain 0.1% BSA

Aliquoting is unnecessary for -20°C storage

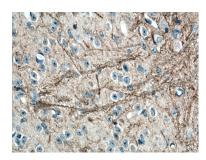
## **Selected Validation Data**



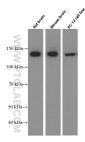
Immunohistochemical analysis of paraffinembedded mouse brain tissue slide using 66396-1-Ig (NF-M antibody) at dilution of 1:1000 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



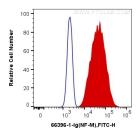
Immunohistochemical analysis of paraffinembedded mouse brain tissue slide using 66396-1-Ig (NF-M antibody) at dilution of 1:1000 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded mouse cerebellum tissue slide using 66396-1-1g (NF-M antibody) at dilution of 1:200 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Lysates of rat brain, mouse brain tissues and PC-12 cells were subjected to SDS PAGE followed by western blot with 66396-1-1g (NEFM Antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



1X10^6 PC-12 cells were intracellularly stained with 0.4 ug Anti-Human NF-M (66396-1-Ig, Clone:2E3B12) and CoraLite® 488-Conjugated AffiniPure Goat Anti-Mouse IgG(IH+L) at dilution 1:1000 (red), or 0.4 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Immunohistochemical analysis of paraffinembedded rat brain tissue slide using 66396-1-lg (NF-M antibody) at dilution of 1:4000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).