

NF-M Monoclonal antibody

Catalog Number: 66396-1-Ig

Basic Information

Catalog Number: 66396-1-Ig	GenBank Accession Number: BC002421	Purification Method: Protein A purification
Size: 1200 µg/ml	GeneID (NCBI): 4741	CloneNo.: 2E3B12
Source: Mouse	UNIPROT ID: P07197	Recommended Dilutions: WB 1:2000-1:20000 IHC 1:200-1:2000
Isotype: IgG1	Full Name: neurofilament, medium polypeptide	
Immunogen Catalog Number: AG22709	Calculated MW: 102 kDa Observed MW: 140 kDa	

Applications

Tested Applications:

FC, IHC, WB, 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

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

Storage:

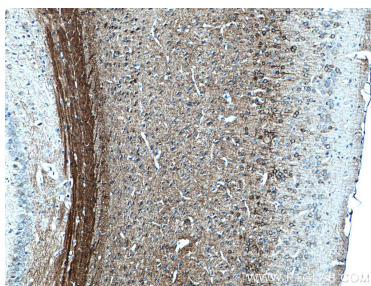
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

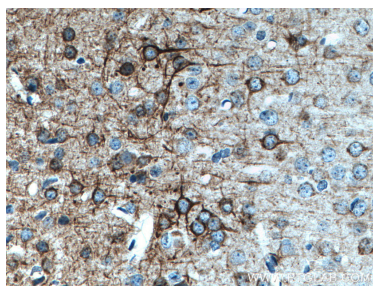
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

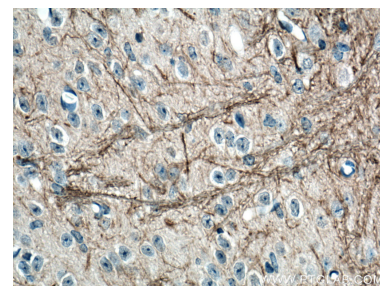
Selected Validation Data



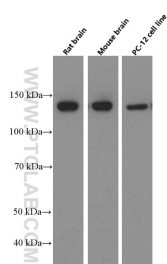
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 66396-1-Ig (NF-M antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



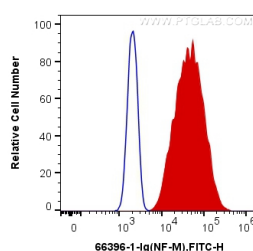
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 66396-1-Ig (NF-M antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse cerebellum tissue slide using 66396-1-Ig (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-Ig (NEFM Antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



1X10⁶ 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(H+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).