For Research Use Only

# NF-L Monoclonal antibody

Catalog Number:60189-1-Ig 4 Publications

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## Basic Information

Catalog Number:
60189-1-Ig

Size:
150ul , Concentration: 1435 ug/ml by Nanodrop;

Source:
Mouse

Isotype:
IgG1

Immunogen Catalog Number:
AG15178

GenBank Accession Number:
BC039237

GeneID (NCBI):
4747

UNIPROT ID:
P07196

Full Name:
neurofilament, light polypeptide

Calculated MW:
543 aa, 62 kDa

Observed MW:
65 kDa

Purification Method:
Protein G purification

CloneNo.:
5C12G4

Recommended Dilutions:
WB 1:20000-1:100000
IHC 1:250-1:1000
IF-P 1:50-1:500

## Applications

Tested Applications:
WB, IHC, IF-P, FC (Intra), ELISA

Cited Applications:
WB, IF, FC (Intra)

Species Specificity:
human, mouse, rat, pig

Cited Species:
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 : PC-12 cells, human brain tissue, pig brain tissue, rat brain tissue, mouse brain tissue

IHC : rat brain tissue, human brain tissue, mouse brain tissue

IF-P : mouse brain tissue, rat brain tissue

FC (Intra) : PC-12 cells,

## Background Information

NEFL, also named as NF68 and NF-L, 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,145-160 kDa and NF-H, 200-220 kDa.This antibody is specific to NEFL.

## Notable Publications

| Author | Pubmed ID | Journal | Application |
|---|---|---|---|
| Jing Duan | 39385200 | J Neuroinflammation | FC (Intra) |
| Ying Zhou | 38940834 | ACS Nano | WB,IF |
| Rui Yang | 38701940 | J Stroke Cerebrovasc Dis | WB |

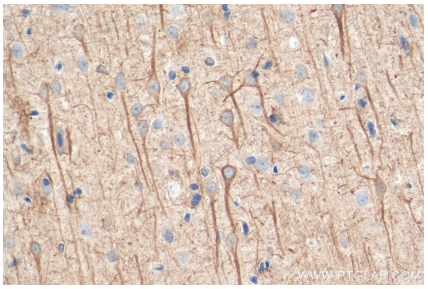
## Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

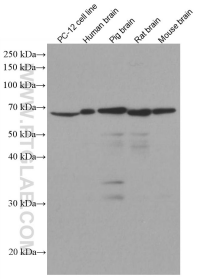
*** 20ul sizes contain 0.1% BSA

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

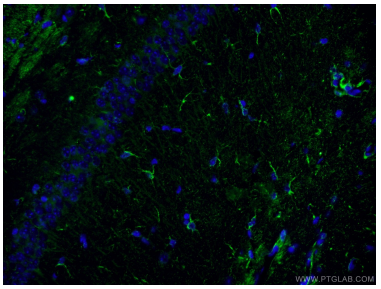
## Selected Validation Data



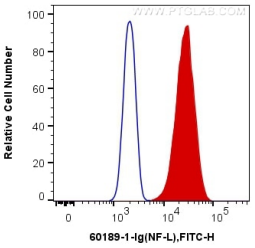
Immunohistochemical analysis of paraffin-embedded rat brain tissue slide using 60189-1-Ig (NF-L antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).




Various lysates were subjected to SDS PAGE followed by western blot with 60189-1-Ig (NF-L antibody) at dilution of 1:100000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed mouse brain tissue using 60189-1-Ig (NF-L antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Mouse IgG(H+L).




1X10^6 PC-12 cells were intracellularly stained with 0.4 ug Anti-Human NF-L (60189-1-Ig, Clone:5C12G4) 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).

Immunohistochemical analysis of paraffin-embedded rat brain tissue slide using 60189-1-Ig (NF-L antibody) at dilution of 1:10000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).