

For Research Use Only

# NF-L Monoclonal antibody

Catalog Number: 60189-1-Ig **4 Publications**



## Basic Information

<b>Catalog Number:</b> 60189-1-Ig	<b>GenBank Accession Number:</b> BC039237	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 150ul , Concentration: 333 ug/ml by Bradford method using BSA as the standard;	<b>GeneID (NCBI):</b> 4747	<b>CloneNo.:</b> 5C12G4
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> P07196	<b>Recommended Dilutions:</b> WB 1:20000-1:100000 IHC 1:250-1:1000 IF-P 1:50-1:500
<b>Isotype:</b> IgG1	<b>Full Name:</b> neurofilament, light polypeptide	
<b>Immunogen Catalog Number:</b> AG15178	<b>Calculated MW:</b> 543 aa, 62 kDa	
	<b>Observed MW:</b> 65 kDa	

## Applications

<b>Tested Applications:</b> WB, IHC, IF-P, FC (Intra), ELISA	<b>Positive Controls:</b> <b>WB :</b> PC-12 cells, human brain tissue, pig brain tissue, rat brain tissue, mouse brain tissue <b>IHC :</b> rat brain tissue, human brain tissue, mouse brain tissue <b>IF-P :</b> mouse brain tissue, rat brain tissue
<b>Cited Applications:</b> WB, IF, FC (Intra)	
<b>Species Specificity:</b> human, mouse, rat, pig	
<b>Cited Species:</b> human, mouse, rat	
<b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b>	

## 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

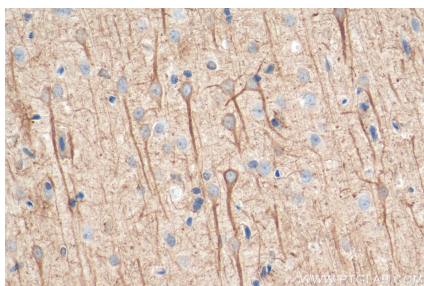
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
**Aliquoting is unnecessary for -20°C storage**

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

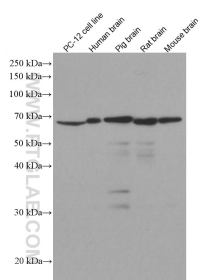
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

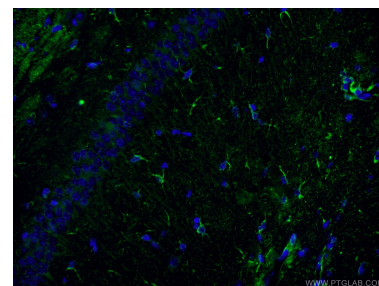
## Selected Validation Data



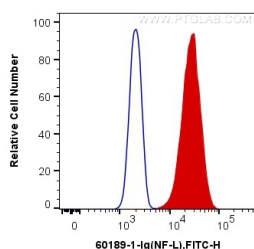
Immunohistochemical analysis of paraffin-embedded rat brain tissue slide using 60189-1-Ig (NF-L antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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<sup>6</sup> 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).