### For Research Use Only

# NF-H/NF200 Monoclonal antibody

Catalog Number: 60331-1-lg 20 Publications



**Basic Information** 

Catalog Number: 60331-1-lg Concentration:

1000 ug/ml
Source:
Mouse
Isotype:
IgG2a

Immunogen Catalog Number: AG13517

GenBank Accession Number: Purification Method:

BC014185

4744

P12036

112 kDa Observed MW: 200 kDa

GeneID (NCBI):

**UNIPROT ID:** 

Full Name:

Calculated MW:

neurofilament, heavy polypeptide

Protein A purification CloneNo.: 1A3C7

Recommended Dilutions: WB 1:5000-1:50000 IHC 1:4000-1:16000 IF-P 1:200-1:800

**Applications** 

Tested Applications:

WB, IHC, IF-P, FC (Intra), ELISA

Cited Applications: WB, IHC, IF 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: pig cerebellum tissue, rat brain tissue, mouse

brain tissue

IHC: rat cerebellum tissue, rat brain tissue

IF-P: rat brain tissue, FC (Intra): SH-SY5Y cells,

## **Background Information**

NEFH, also named as KIAA0845 and NFH, Belongs to the intermediate filament family. It has an important function in mature axons that is not subserved by the two smaller NF proteins. Neurofilaments are the 10nm 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 recognize NEFH only.

### **Notable Publications**

Author	Pubmed ID	Journal	Application
Shishi Shen	36288210	ACS Nano	IF
Huangao Zhou	32474063	J Chem Neuroanat	IHC
Zi-Jie Rong	35602557	Front Cell Neurosci	IHC

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

For technical support and original validation data for this product please contact:

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

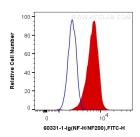
### Selected Validation Data



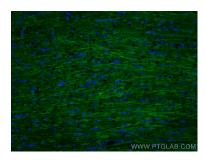
pig cerebellum tissue were subjected to SDS PAGE followed by western blot with 60331-1-1g (NF-H antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffinembedded rat cerebellum tissue slide using 60331-1-Ig (NF-H antibody) at dilution of 1:8000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1X10^6 SH-SY5Y cells were intracellularly stained with 0.2 ug Anti-Human NF-H/NF200 (60331-1-lg, Clone:1A3C7) and CoraLite®488-Conjugated AffiniPure Goad Anti-House IgG(H+L) at dilution 1:1000 (red), or 0.2 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Immunofluorescent analysis of (4% PFA) fixed rat brain tissue using NF-H/NF200 antibody (60331-1-Ig, Clone: 1A3C7) at dilution of 1:400 and CoraLite@488-Conjugated Affini Pure Goat Anti-Mouse IgG(H+L).



Immunohistochemical analysis of paraffinembedded rat brain tissue slide using 60331-1-lg (NF-H antibody) at dilution of 1:2000 (under 4x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).