For Research Use Only

NF-M-Specific Polyclonal antibody

Catalog Number:20664-1-AP 3 Publications

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Basic Information

Catalog Number:
20664-1-AP

Size:
150ul , Concentration: 700 ug/ml by Nanodrop and 347 ug/ml by Bradford method using BSA as the standard;

Source:
Rabbit

Isotype:
IgG

GenBank Accession Number:
NM_005382

GeneID (NCBI):
4741

UNIPROT ID:
P07197

Full Name:
neurofilament, medium polypeptide

Calculated MW:
102 kDa

Observed MW:
140-160 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB: 1:500-1:3000
IP: 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate
IHC: 1:50-1:500
IF/ICC: 1:50-1:500
FC (Intra): 0.40 ug per 10^6 cells in a 100 µl suspension

Applications

Tested Applications:
WB, IHC, IF/ICC, FC (Intra), IP, ELISA

Cited Applications:
WB

Species Specificity:
human, mouse, rat

Cited Species:
human, mouse

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

IP : rat brain tissue,

IHC : human brain tissue, rat brain tissue

IF/ICC : SH-SY5Y cells,

FC (Intra) : PC-12 cells,

Background Information

NEFM, also named as NEF3 and NFM, belongs to the intermediate filament family. 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. The antibody is specific to NEFM.

Notable Publications

Author	Pubmed ID	Journal	Application
Peng-Peng Zhu	35348668	Hum Mol Genet	WB
Markus T Sainio	35237613	Front Cell Dev Biol	WB
Shiladitya Mitra	38802853	Mol Brain	

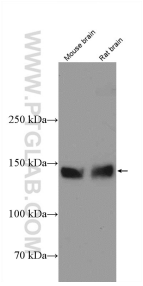
Storage

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

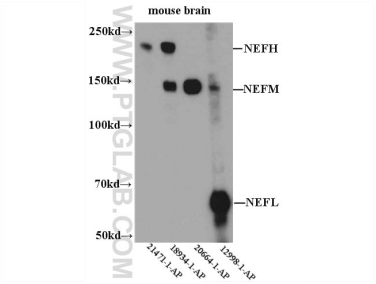
*** 20ul sizes contain 0.1% BSA

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

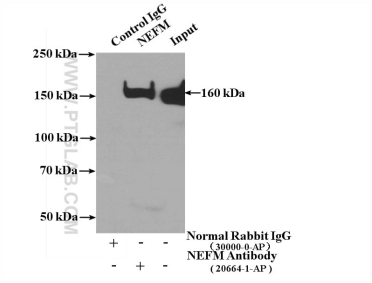
Selected Validation Data



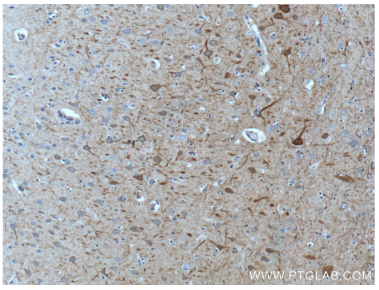
mouse brain and rat brain tissues were subjected to SDS PAGE followed by western blot with 20664-1-AP (NF-M-Specific antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



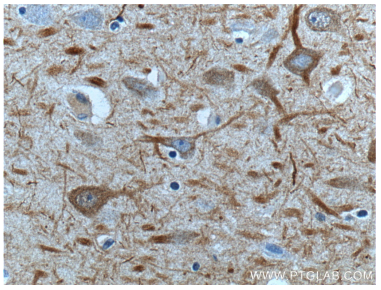
WB result of 20664-1-AP.



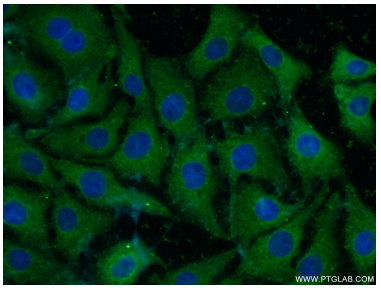
IP result of anti-NF-M-Specific (IP:20664-1-AP, 4ug; Detection:20664-1-AP 1:1000) with rat brain tissue lysate 4000ug.



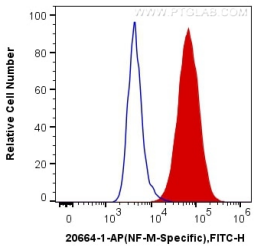
Immunohistochemical analysis of paraffin-embedded human brain tissue slide using 20664-1-AP (NF-M-Specific antibody at dilution of 1:200 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human brain tissue slide using 20664-1-AP (NF-M-Specific antibody at dilution of 1:200 (under 40x lens).



Immunofluorescent analysis of (-20°C Ethanol) fixed SH-SY5Y cells using 20664-1-AP (NF-M-Specific antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated Goat Anti-Rabbit IgG(H+L).



1X10^6 PC-12 cells were intracellularly stained with 0.4 ug Anti-Human NF-M-Specific (20664-1-AP) and CoraLite®488-Conjugated Goat Anti-Rabbit 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).