Anti-NF-H Antibody [2G1]

RT1424

Product Type:	Mouse monoclonal IgG1, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IP, IF, IHC-P
Molecular Wt:	200 kDa
Clone number:	2G1

Description: Neurofilament-H (NF-H), for neurofilament heavy polypeptide, a member of the intermediate filament family, is a major component of neuronal cytoskeletons. Neurofilaments are dynamic structures; they contain phosphorylation sites for a large number of protein kinases, including protein kinase A, protein kinase C, cyclin-dependent kinase 5, extracellular signal regulated kinase, glycogen synthase kinase-3, and stress-activated protein kinase gamma. In addition to their role in the control of axon caliber, neurofilaments may affect other cytoskeletal elements, such as microtubules and Actin filaments. Changes in neurofilament phosphorylation or metabolism are frequently observed in neurodegenerative diseases, including amyotrophic lateral sclerosis (ALS), Parkinson's disease and Alzheimer's disease.

Immunogen: A neurofilament NF-H protein isolated from a cytoskeletal preparation from brain tissue homogenate of calf origin.

Positive control: rat brain tissue, mouse brain tissue.

Subcellular location: Cytoplasm, membrane

Database links: SwissProt: P12036 Human

Recommended Dilutions:

WB	1:500-1:1,000
IP	1-2 μg per 100-500 μg of total protein(1 ml of cell lysate)
IF	1:50-1:500
IHC-P	1:50-1:500

Storage Buffer: 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Storage Instruction: Store at +4℃

Purity: Protein A affinity purified.

Images

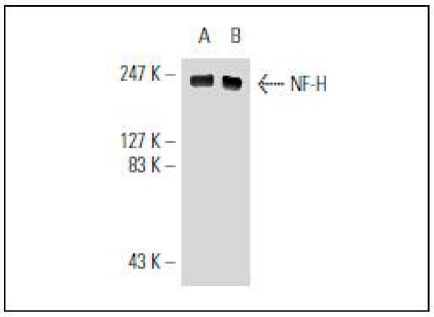

Fig1: Western blot analysis of NF-H expression in rat brain (A) and mouse brain (B) tissue extracts.

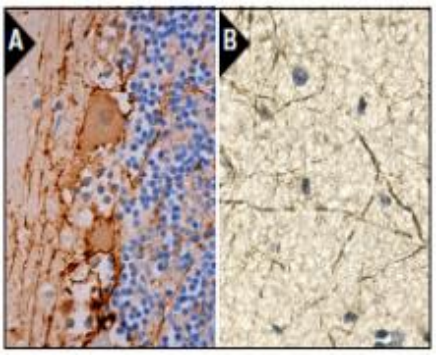

Fig2: Immunoperoxidase staining of formalin fixed, paraffin-embedded human cerebellum tissue showing membrane and cytoplasmic staining of Purkinje cells and neuropil staining in granular layer and molecular layer (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human cerebellum tissue showing membrane and cytoplasmic staining of Purkinje cells and neuropil staining in granular layer and molecular layer (B).

Background References

1. Zhang, L., et al. 2011. Concentration-dependent effect of nerve growth factor on cell fate determination of neural progenitors. Stem Cells Dev. 20: 1723-1731.
2. Strong, M.J. 1999. Neurofilament metabolism in sporadic amyotrophic lateral sclerosis. J. Neurol. Sci. 169: 170-177.
3. Nakamura, Y., et al. 1999. Casein kinase II is responsible for phosphorylation of NF-L at Ser-473. FEBS Lett. 455: 83-86.