NF-H Recombinant Antibody [JF99-07] - Rat IgG1 (Chimeric)

HA601582

Product Type:	Recombinant Chimeric Antibody, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IHC-P
Molecular Wt:	Predicted band size: 112 kDa
Clone number:	JF99-07

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: Synthetic peptide within human NEFH aa 690-740.

Positive control: Mouse cerebellum tissue lysate, Rat brain tissue lysate, mouse cerebellum tissue, rat cerebellum tissue.

Subcellular location: Cytoplasm, cytoskeleton, Cell projection, axon.

Database links: SwissProt: P12036 Human | P19246 Mouse | P16884 Rat

Recommended Dilutions:

WB	1:2,000
IHC-P	1:500-1:2,000

Storage Buffer: PBS (pH7.4), 0.1% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Shipped at 4℃. Store at +4℃ short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20℃ long term.

Purity: Protein A affinity purified.

Images

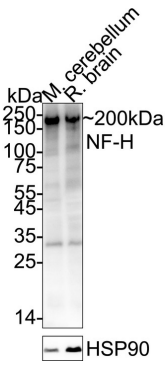

Fig1: Western blot analysis of NF-H on different lysates with Rat anti-NF-H antibody (HA601582) at 1/2,000 dilution.

Lane 1: Mouse cerebellum tissue lysate (10 µg/Lane)
Lane 2: Rat brain tissue lysate (20 µg/Lane)

Predicted band size: 112 kDa
Observed band size: 200 kDa

Exposure time: 5 seconds; ECL: K1801;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA601582) at 1/2,000 dilution was used in primary antibody dilution (K1803) at 4℃ overnight. Goat Anti-Rat IgG H&L - HRP Secondary Antibody (HA1023) at 1/50,000 dilution was used for 1 hour at room temperature.

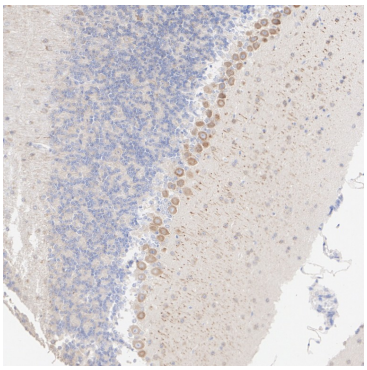

Fig2: Immunohistochemical analysis of paraffin-embedded mouse cerebellum tissue with Rat anti-NF-H antibody (HA601582) at 1/2,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA601582) at 1/2,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

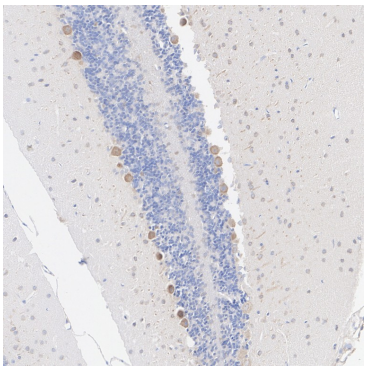

Fig3: Immunohistochemical analysis of paraffin-embedded rat cerebellum tissue with Rat anti-NF-H antibody (HA601582) at 1/2,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA601582) at 1/2,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

Background References

1. Wang J et al. Unveiling the NEFH+ malignant cell subtype: Insights from single-cell RNA sequencing in prostate cancer progression and tumor microenvironment interactions. Front Immunol. 2024 Dec
2. Koudonas A et al. Methylation of PCDH17 and NEFH as prognostic biomarker for nonmetastatic RCC: A cohort study. Medicine (Baltimore). 2022 Jul