bs-10680R

[Primary Antibody]

NF-H Rabbit pAb

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DATASHEET

Host: Rabbit **Isotype:** IgG

Clonality: Polyclonal

GeneID: 4744 **SWISS:** P12036

Target: NF-H

Immunogen: KLH conjugated synthetic peptide derived from human NF-H: 21-120/1026.

Purification: affinity purified by Protein A

Concentration: 1mg/ml

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Background: Neurofilaments can be defined as the intermediate or 10nm filaments found in specifically in neuronal cells. When visualised using an electron microscope, neurofilaments appear as 10nm diameter fibres of indeterminate length that generally have fine wispy protrusions from their sides. They are particularly abundant in axons of large projection neurons. They probably function to provide structural support for neurons and their synapses and to support the large axon diameters required for rapid conduction of impulses down axons. Neurofilaments are composed of a mixture of subunits, which usually includes the three neurofilament triplet proteins neurofilament light (NFL), neurofilament medium (NFM) and neurofilament heavy (NFH). Neurofilaments may also include smaller amounts of peripherin, alpha internexin, nestin and in some cases vimentin. Antibodies to the various neurofilament subunits are very useful cell type markers since the proteins are among the most abundant of the nervous system, are expressed only in neurons, and are biochemically very stable. Some studies have shown that levels of neurofilament heavy and neurofilament light are elevated in patients with Alzheimer's disease, frontotemporal lobe dementia, and vascular dementia.

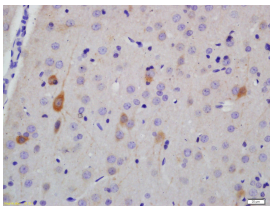
Applications: **IHC-P** (1:100-500)
IHC-F (1:100-500)
IF (1:100-500)
Flow-Cyt (1:ug/Test)
ICC/IF (1:100)

Reactivity: Human, Rat (predicted: Mouse, Rabbit, Pig, Sheep, Cow, Dog)

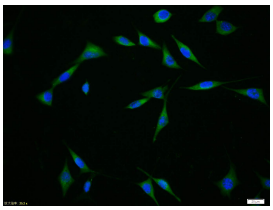
Predicted MW.: 118 kDa

Subcellular Location: Cytoplasm

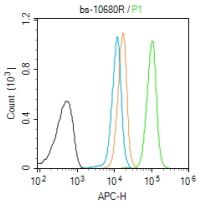
VALIDATION IMAGES



Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min; Incubation: Anti-NF-H Polyclonal Antibody, Unconjugated(bs-10680R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Tissue/cell:SH-SY5Y cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 20 min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min; Antibody incubation with (NF-H) polyclonal Antibody, Unconjugated (bs-10680R) 1:100, 90 minutes at 37°C; followed by a FITC conjugated Goat Anti-Rabbit IgG antibody at 37°C for 90 minutes, DAPI (blue, C02-04002) was used to stain the cell nuclei.



Blank control (Black line): Molt4 (Black). Primary Antibody (green line):Rabbit Anti-NF-H antibody (bs-10680R) Dilution:1µg /10^6 cells; Isotype Control Antibody (orange line): Rabbit IgG . Secondary Antibody (white blue line): Goat anti-rabbit IgG-AF647 Dilution: 1µg /test. Protocol The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 90% ice-cold methanol for 20 min at room temperature. The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.

SELECTED CITATIONS

- **[IF=12.8]** Xiaolan Ou. et al. VEGF-loaded ROS-responsive nanodots improve the structure and function of sciatic nerve lesions in type II diabetic peripheral neuropathy.. BIOMATERIALS. 2024 Oct;:122906 IF ;Rat. 39488031
- **[IF=12.479]** Injoo Hwang. et al. Endothelin-1 enhances the regenerative capability of human bone marrow-derived mesenchymal stem cells in a sciatic nerve injury mouse model. Biomaterials. 2021 Aug;275:120980 IHC ;Mouse. 34198163
- **[IF=3.37]** Liu, Yi, et al. "Conserved Dopamine Neurotrophic Factor-Transduced Mesenchymal Stem Cells Promote Axon Regeneration and Functional Recovery of Injured Sciatic Nerve." PLOS ONE 9.10 (2014): e110993. IHC ;="Rat". 25343619
- **[IF=3.26]** Liu, Xin-Qi, et al. "Regulation of neuroendocrine cells and neuron factors in the ovary by zinc oxide nanoparticles." Toxicology Letters (2016). IHC ;="Chicken". 27215404
- **[IF=3.3]** Juan Zhang. et al.Up-regulation of miR-10a-5p expression inhibits the proliferation and differentiation of neural stem cells by targeting Chl1.Acta Biochimica et Biophysica Sinica.2024 Jun 5;56(10):1483-1497. ICC ;Mouse. 10.3724/abbs.2024078