

# Product Datasheet

## NF-H Antibody (AH1) - BSA Free NBP1-05209

Unit Size: 0.1 ml

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

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**NBP1-05209**

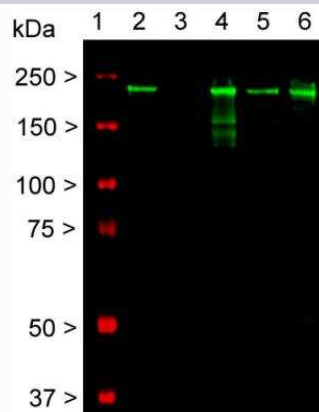
NF-H Antibody (AH1) - BSA Free

Product Information	
Unit Size	0.1 ml
Concentration	1 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	AH1
Preservative	5mM Sodium Azide
Isotype	IgG1
Purity	Affinity purified
Buffer	50% PBS, 50% glycerol
Target Molecular Weight	200 kDa
Product Description	
Host	Mouse
Gene ID	4744
Gene Symbol	NEFH
Species	Human, Mouse, Rat, Porcine, Bovine, Equine
Reactivity Notes	In some species there is some cross-reactivity with the phosphorylated KSP sequences found in the related neurofilament subunit NF-M. The antibody recognizes NF-H strongly in all mammals tested to date and also in chicken
Marker	Neuronal Marker
Specificity/Sensitivity	Clone AH1 recognizes phosphorylated NF-H KSP sequences. Does not recognize non-phosphorylated KSP sequences.
Immunogen	Native axonal phosphorylated Neurofilament Heavy protein purified from bovine spinal cord
Product Application Details	
Applications	Western Blot, Immunohistochemistry-Paraffin, Immunocytochemistry/Immunofluorescence, Immunohistochemistry, Immunohistochemistry Free-Floating
Recommended Dilutions	Western Blot 1:10000, Immunohistochemistry 1:1000, Immunocytochemistry/Immunofluorescence 1:1000, Immunohistochemistry-Paraffin, Immunohistochemistry Free-Floating 1:1000
Application Notes	This 200kDa Neurofilament Heavy antibody is useful for Immunocytochemistry, Western Blot, and Immunohistochemistry (both IHC-P and IHC-Fr). Use in IHC-P reported in scientific literature (PMID:35835391).

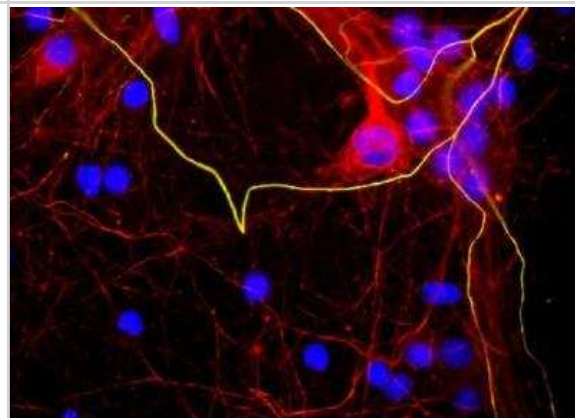


## Images

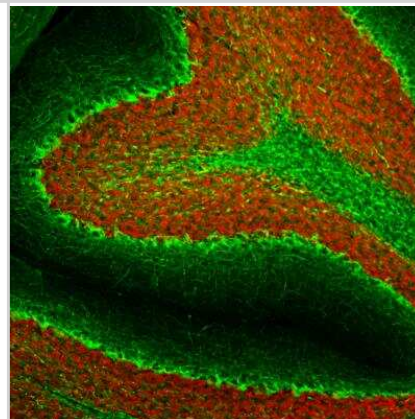
**Western Blot: NF-H Antibody (AH1) [NBP1-05209]** - Analysis of the heavily phosphorylated axonal form of NF-H protein (pNF-H) in neural tissue lysates (20ug/lane) with affinity purified mouse monoclonal anti-pNF-H antibody (NBP1-05209) at dilution of 1:5,000. Lanes on the blot are: [1] Protein size marker, [2] Adult rat whole brain [3] Embryonic (E20) rat whole brain [4] Adult rat spinal cord [5] Adult mouse whole brain [6] Adult mouse spinal cord. Rodent pNF-H protein appears as a single band of about 200kDa in adult rat and mouse lysates, but is not present in early development (Lane 3). Additional bands appearing on the blot (Lane 4) are most likely partially degraded products of pNF-H protein.



**Immunocytochemistry/Immunofluorescence: NF-H Antibody (AH1) [NBP1-05209]** - Mixed neuron/glia cultures stained with NBP1-05209 (green) and also stained with rabbit polyclonal antibody to neurofilament NF-L NB300-131 (red). The NF-L antibody stains neurofilaments in both axons and dendrites, and so can reveal neuronal cell bodies, while NBP1-05209 binds to only heavily phosphorylated forms of NF-H which are localized to mature axonal neurofilaments. In this image a few axons course from left to right and top to bottom since they contain both NF-L and phosphorylated NF-H they appear golden in color. Blue shows the distribution of DNA.



**Immunohistochemistry Free-Floating: NF-H Antibody (AH1) [NBP1-05209]** - Analysis of rat cerebellum section stained with mouse mAb to pNF-H, NBP1-05209, dilution 1:2,000 in green, and costained with rabbit pAb to FOX3/NeuN, dilution 1:5,000 in red. Following transcardial perfusion with 4% paraformaldehyde, brain was post fixed for 24 hours, cut to 45uM, and free-floating sections were stained with above antibodies. The NBP1-05209 antibody stains axons in the granular layer and white matter and prominent basket cell axons surrounding the large Purkinje neurons. The FOX3/NeuN antibody specifically labels nuclei of granular and other neurons, but does not stain Purkinje cells.



## Publications

Duan S, Sawyer TW, Sontz RA et al. GFAP-directed Inactivation of Men1 Exploits Glial Cell Plasticity in Favor of Neuroendocrine Reprogramming Cellular and molecular gastroenterology and hepatology 2022-07-11 [PMID: 35835391] (IHC-P, Mouse)



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### **Products Related to NBP1-05209**

HAF007	Goat anti-Mouse IgG Secondary Antibody [HRP]
NB720-B	Rabbit anti-Mouse IgG (H+L) Secondary Antibody [Biotin]
NBP1-97005-0.5mg	Mouse IgG1 Isotype Control (MG1)
H00004744-Q01-10ug	Recombinant Human NF-H GST (N-Term) Protein

### **Limitations**

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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