

NF-H Rabbit pAb

NF-H Rabbit pAb
Catalog # AP52119

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	P12036
Reactivity	Rat, Mouse
Predicted	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	111838
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human NF-H
Epitope Specificity	901-1000/1026
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
DISEASE	Defects in NEFH are a cause of susceptibility to amyotrophic lateral sclerosis (ALS) [MIM:105400]. ALS is a neurodegenerative disorder affecting upper and lower motor neurons, and resulting in fatal paralysis. Sensory abnormalities are absent. Death usually occurs within 2 to 5 years. The etiology is likely to be multifactorial, involving both genetic and environmental factors.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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.

Additional Information

Gene ID	4744
Other Names	Neurofilament heavy polypeptide, NF-H, 200 kDa neurofilament protein, Neurofilament triplet H protein, NEFH, KIAA0845, NFH
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	NEFH
Synonyms	KIAA0845, NFH
Function	Neurofilaments usually contain three intermediate filament proteins: NEFL, NEFM, and NEFH which are involved in the maintenance of neuronal caliber. NEFH has an important function in mature axons that is not subserved by the two smaller NF proteins. May additionally cooperate with the neuronal intermediate filament proteins PRPH and INA to form neuronal filamentous networks (By similarity).
Cellular Location	Cytoplasm, cytoskeleton. Cell projection, axon {ECO:0000250 UniProtKB:P19246}

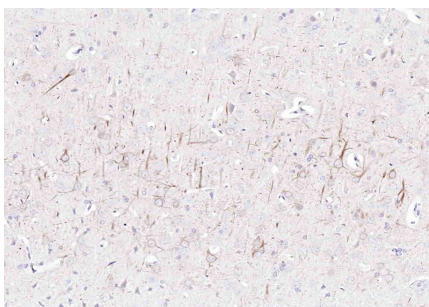
Background

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

References

Lees J.F.,et al.EMBO J. 7:1947-1955(1988).
Zhu Y.,et al.Beijing Yi Ke Da Xue Xue Bao 31:531-531(1999).
Nagase T.,et al.DNA Res. 5:355-364(1998).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Dunham I.,et al.Nature 402:489-495(1999).

Images



Paraformaldehyde-fixed, paraffin embedded (rat brain);
Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (NF-H) Polyclonal Antibody, Unconjugated (AP52119) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.