abcam

Product datasheet

Anti-68kDa Neurofilament/NF-L antibody ab24520

★★★★★ 1 Abreviews 2 Images

Overview

Product name	Anti-68kDa Neurofilament/NF-L antibody
Description	Chicken polyclonal to 68kDa Neurofilament/NF-L
Host species	Chicken
Tested applications	**Suitable for:** IHC, WB
Species reactivity	**Reacts with:** Mouse, Rat, Cow
Immunogen	Tissue, cells or virus corresponding to Cow 68kDa Neurofilament/NF-L.
General notes	To raise this antibody bovine intermediate filaments were prepared from spinal cords by the method of Delacourte et al. and the cytoskeletal material was dissolved in 6M urea. To ensure greater specificity for NFL, animals were boosted with recombinant mouse NFL purified from bacteria. This antibody was generated in chicken by standard procedures and immunoglobulin was extracted from egg yolk. This is the chicken homologue of mammalian IgG and can be used in the same general way, with the caveat that this type of antibody does not bind either Protein A or Protein G. The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	Preservative: 0.065% Sodium azide Constituent: PBS
Purification notes	The IgY preparation was made by chloroform delipidation of egg yolk followed by polyethylene glycol precipitation.
Primary antibody notes	To raise this antibody bovine intermediate filaments were prepared from spinal cords by the method of Delacourte et al. and the cytoskeletal material was dissolved in 6M urea. To ensure

	greater specificity for NFL, animals were boosted with recombinant mouse NFL purified from bacteria. This antibody was generated in chicken by standard procedures and immunoglobulin was extracted from egg yolk. This is the chicken homologue of mammalian IgG and can be used in the same general way, with the caveat that this type of antibody does not bind either Protein A or Protein G.
Clonality	Polyclonal
Isotype	IgY

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab24520 in the following tested applications.

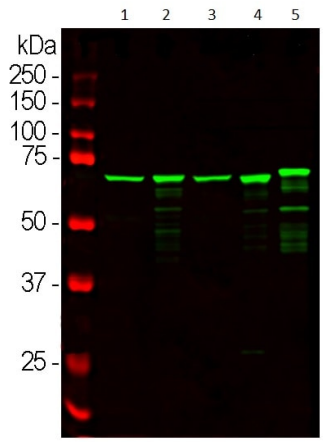
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC		1/2000.
WB		1/20000. Predicted molecular weight: 68 kDa. Strong bands at ~68kDa corresponds to NF-L proteins which are known to have slightly different apparent SDS-PAGE molecular weights across species boundaries.

Target

Function	Neurofilaments usually contain three intermediate filament proteins: L, M, and H which are involved in the maintenance of neuronal caliber.
Involvement in disease	Defects in NEFL are the cause of Charcot-Marie-Tooth disease type 1F (CMT1F) [MIM:607734]. CMT1F is a form of Charcot-Marie-Tooth disease, the most common inherited disorder of the peripheral nervous system. Charcot-Marie-Tooth disease is classified in two main groups on the basis of electrophysiologic properties and histopathology: primary peripheral demyelinating neuropathy or CMT1, and primary peripheral axonal neuropathy or CMT2. Neuropathies of the CMT1 group are characterized by severely reduced nerve conduction velocities (less than 38 m/sec), segmental demyelination and remyelination with onion bulb formations on nerve biopsy, slowly progressive distal muscle atrophy and weakness, absent deep tendon reflexes, and hollow feet. CMT1F is characterized by onset in infancy or childhood (range 1 to 13 years). Defects in NEFL are the cause of Charcot-Marie-Tooth disease type 2E (CMT2E) [MIM:607684]. CMT2E is an autosomal dominant form of Charcot-Marie-Tooth disease type 2. Neuropathies of the CMT2 group are characterized by signs of axonal regeneration in the absence of obvious myelin alterations, normal or slightly reduced nerve conduction velocities, and progressive distal muscle weakness and atrophy.
Sequence similarities	Belongs to the intermediate filament family.
Domain	The extra mass and high charge density that distinguish the neurofilament proteins from all other intermediate filament proteins are due to the tailpiece extensions. This region may form a charged scaffolding structure suitable for interaction with other neuronal components or ions.
Post-translational modifications	O-glycosylated. Phosphorylated in the Head and Rod regions by the PKC kinase PKN1, leading to inhibit polymerization.

Images

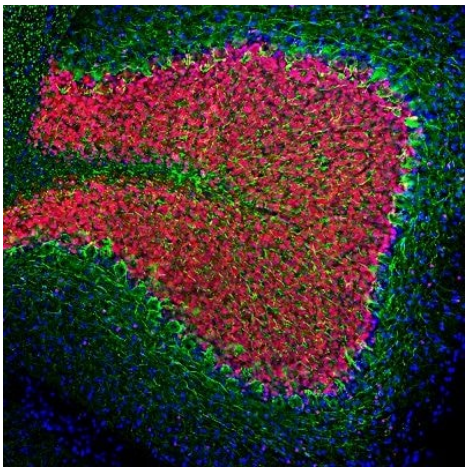


Western blot - Anti-68kDa Neurofilament/NF-L antibody (ab24520)

All lanes : Anti-68kDa Neurofilament/NF-L antibody (ab24520) at 1/20000 dilution

Lane 1 : Rat brain lysate
Lane 2 : Rat spinal cord lysate
Lane 3 : Mouse brain lysate
Lane 4 : Mouse spinal cord lysate
Lane 5 : Cow spinal cord lysate

Predicted band size: 68 kDa



Immunohistochemistry - Anti-68kDa Neurofilament/NF-L antibody (ab24520)

Immunofluorescent analysis of 4% paraformaldehyde-fixed (transcardial perfusion) of free floating section of rat cerecellum tissue stained for 68kDa Neurofilament/NF-L (green) using ab24520 at 1/200 dilution. FOX3/NeuN is stained with an anti-FOX3/NeuN antibody (red).

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