

Product datasheet

Anti-68kDa Neurofilament/NF-L antibody [2F11], prediluted ab74592

2 Images

Overview

Product name	Anti-68kDa Neurofilament/NF-L antibody [2F11], prediluted
Description	Mouse monoclonal [2F11] to 68kDa Neurofilament/NF-L, prediluted
Host species	Mouse
Specificity	<p>ab74592 labels neurons, neuronal processes, and peripheral nerves as well as sympathetic ganglion cells and adrenal medulla. Cell body of neurons, containing the non-phosphorylated neurofilament, is weakly stained. We have data to indicate that this antibody may not cross react with Dog. However, this has not been conclusively tested and expression levels may vary in certain cell lines/tissues.</p> <p>Detects 68 kDa component of the polypeptide subunit. Some labs have reported an additional 200 kDa band under certain conditions. We cannot confirm if this is in fact a multimer of the 68 kDa protein.</p>
Tested applications	Suitable for: IHC-P
Species reactivity	Reacts with: Mouse, Rat, Rabbit, Cat, Human
Immunogen	Full length native protein (purified) corresponding to Human 68kDa Neurofilament/NF-L.
Positive control	Human and rat brain cerebellum tissue.
General notes	<p>In originator's published literature (e.g. PMID 6206727), this clone 2F11 has been shown specific to 68kDa protein however our testing on two different occasions show a 200 kDa protein band in western blot, under reduced and denaturing conditions. The 200 kDa could be either the glycosylated form of the 68kDa or 200kD a protein however we haven't done any further test to confirm it. We will welcome any feedback from researchers have who used the same clone. Previously labelled as 68kDa Neurofilament.</p> <p>Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.</p> <p>Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.</p> <p>We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.</p> <p>In preparation for this, we have started to update the applications & species that this product is</p>

Abpromise guaranteed for.

We are also updating the applications & species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

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, as well as customer reviews and Q&As.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C.
Purity	Tissue culture supernatant
Purification notes	ab74592
Clonality	Monoclonal
Clone number	2F11
Isotype	IgG1
Light chain type	kappa

Applications

Our [Abpromise guarantee](#) covers the use of **ab74592** 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-P		1/1.

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

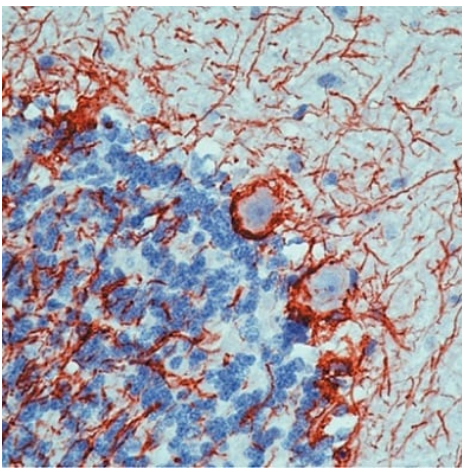
The extra mass and high charge density that distinguish the neurofilament proteins from all other intermediate filament proteins are due to the tailpiece extensions. This region may form a charged scaffolding structure suitable for interaction with other neuronal components or ions.

Post-translational modifications

O-glycosylated.

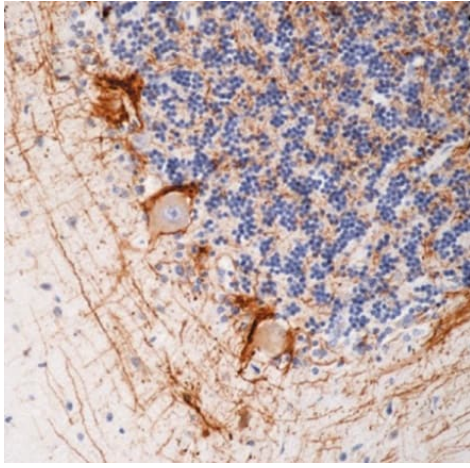
Phosphorylated in the Head and Rod regions by the PKC kinase PKN1, leading to inhibit polymerization.

Images



Immunohistochemical analysis of rat cerebellum tissue labeling Neurofilament with ab74592 using peroxidase-conjugated and AEC chromogen.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-68kDa Neurofilament/NF-L antibody [2F11], prediluted (ab74592)



Immunohistochemical analysis of human cerebellum tissue labeling Neurofilament with ab74592 using peroxidase-conjugated and DAB chromogen.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-68kDa Neurofilament/NF-L antibody [2F11], prediluted (ab74592)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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