# abcam

# Product datasheet

# Anti-68kDa Neurofilament/NF-L antibody ab134460

★★★★★ 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-FoFr, ICC/IF

Species reactivity Reacts with: Mouse

Immunogen Synthetic peptide corresponding to Human 68kDa Neurofilament/NF-L conjugated to keyhole

limpet haemocyanin. sequence shared between the Human (P07196) and Mouse (P08551). Made from three KLH conjugated synthetic peptides corresponding to different regions of NF-L.

General notes Do not freeze the antibody unless you want to store it for longer periods of time. Note, however,

that each time an antibody preparation is frozen, about half its binding activity is lost.

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 short term (1-2 weeks). Store at -20°C or -80°C. Avoid freeze /

thaw cycle.

**Storage buffer** pH: 7

Preservative: 0.02% Sodium azide Constituents: 98% PBS, 1% BSA

Purity Immunogen affinity purified

**Purification notes** IgY fractions were purified from the yolks. These IgY fractions were then affinity-purified using a

peptide column, and the concentrations of the eluates adjusted to 0.3 mg/ml. Finally, equal volumes of each of the three affinity-purified anti-peptide antibodies were mixed, and the

preparation was filter-sterilized.

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**Clonality** Polyclonal

**Isotype** IgY

#### **Applications**

#### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab134460 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-FoFr	<b>★★★</b> ☆☆ <u>(1)</u>	1/1000 - 1/2000. Use 2% paraformaldehyde-fixed tissues.
ICC/IF		1/1000 - 1/2000. Use 2% paraformaldehyde-fixed cells.

### **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.

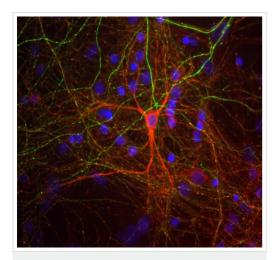
Post-translational modifications

O-glycosylated.

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

polymerization.

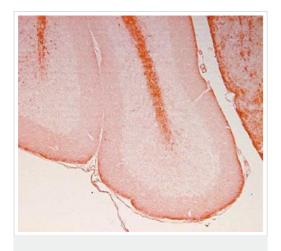
## **Images**



Immunocytochemistry/ Immunofluorescence - Anti-68kDa Neurofilament/NF-L antibody (ab134460)

Immunocytochemistry/Immunofluorescence analysis of dissociated adult mouse cerebral cortical cells labelling 68kDa

Neurofilament/NF-L (green) with ab134460. Cells were fixed with 4% paraformaldehyde. NFL immunoreactivity is red and yellow, Blue - DAPI nuclear stain.



Immunohistochemistry (PFA perfusion fixed frozen sections) - Anti-68kDa Neurofilament/NF-L antibody (ab134460)

Immunohistochemical analysis of adult mouse brain labelling 68kDa Neurofilament/NF-L in axons in the white matter of the cerebellum with ab134460 at 1/1000 dilution (brown staining).

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

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