abcam

Product datasheet

Anti-68kDa Neurofilament/NF-L antibody ab113854

1 Abreviews 1 Image

Overview

Product name Anti-68kDa Neurofilament/NF-L antibody

Description Rabbit polyclonal to 68kDa Neurofilament/NF-L

Host species Rabbit

Tested applications Suitable for: WB

Species reactivity Reacts with: Mouse, Rat, Human

Predicted to work with: Horse, Chicken, Cow, Dog, Pig, Macaque monkey, Gorilla, Orangutan

A

Immunogen Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Positive control This antibody gave a positive signal in the following tissue lysates: Human Brain; Rat Cerebellum;

Human Spinal Cord; Mouse Spinal Cord.

General notesThe 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). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

Storage buffer pH: 7.40

Preservative: 0.02% Sodium azide

Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising

agent. If you would like information about the formulation of a specific lot, please contact our

scientific support team who will be happy to help.

Purity Immunogen affinity purified

1

Clonality Polyclonal

Isotype IgG

Applications

The Abpromise guarantee

Our **Abpromise quarantee** covers the use of ab113854 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
WB		Use a concentration of 1 µg/ml. Detects a band of approximately 68 kDa (predicted molecular weight: 61 kDa).

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.

1110

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.

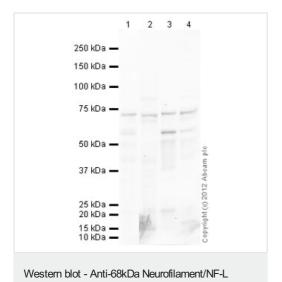
Post-translational modifications

O-glycosylated.

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

polymerization.

Images



antibody (ab113854)

All lanes : Anti-68kDa Neurofilament/NF-L antibody (ab113854) at 1 μg/ml

Lane 1: Human brain tissue lysate - total protein (ab29466)

Lane 2: Cerebellum Rat Tissue Lysate

Lane 3: Human spinal cord tissue lysate - total protein (ab29188)

Lane 4: Spinal Cord (Mouse) Tissue Lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit lgG H&L (HRP) preadsorbed (ab97080) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 61 kDa **Observed band size:** 68 kDa

Additional bands at: 20 kDa, 58 kDa. We are unsure as to the

identity of these extra bands.

Exposure time: 4 minutes

68kDa Neurofilament/NF-L contains a number of potential glycosylation sites (SwissProt) which may explain its migration at a higher molecular weight than predicted.

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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- · Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish

- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.com/abpromise or contact our technical team.

Terms and conditions

• Guarantee only valid for products bought direct from Abcam or one of our authorized distributors