

Product datasheet

Anti-68kDa Neurofilament/NF-L antibody [NEFL/2983R]  
ab270266

Recombinant

2 Images

Overview

|                            |  |
|----------------------------|--|
| <b>Product name</b>        | Anti-68kDa Neurofilament/NF-L antibody [NEFL/2983R]  |
| <b>Description</b>         | Rabbit monoclonal [NEFL/2983R] to 68kDa Neurofilament/NF-L   |
| <b>Host species</b>        | Rabbit   |
| <b>Specificity</b>         | This antibody reacts with a 68kDa protein, identified as light sub-unit of neurofilaments (NF-L).  |
| <b>Tested applications</b> | <b>Suitable for:</b> IHC-P   |
| <b>Species reactivity</b>  | <b>Reacts with:</b> Human<br><b>Predicted to work with:</b> Rat, Chicken, Cow, Pig  |
| <b>Immunogen</b>           | Recombinant full length protein corresponding to Human 68kDa Neurofilament/NF-L.<br>Database link: <a href="#">P07196</a>  |
| <b>Positive control</b>    | IHC-P: Human cerebellum tissue.  |

Properties

|                             |   |
|-----------------------------|---|
| <b>Form</b>                 | Liquid  |
| <b>Storage instructions</b> | Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle. |
| <b>Storage buffer</b>       | pH: 7.2<br>Preservative: 0.05% Sodium azide<br>Constituents: PBS, 0.05% BSA   |
| <b>Purity</b>               | Protein A/G purified  |
| <b>Purification notes</b>   | Purified from Bioreactor Concentrate by Protein A/G.  |
| <b>Clonality</b>            | Monoclonal  |
| <b>Clone number</b>         | NEFL/2983R  |
| <b>Isotype</b>              | IgG   |

Applications

**The Abpromise guarantee**

Our [Abpromise guarantee](#) covers the use of ab270266 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       |           | Use a concentration of 0.25 - 0.5 µg/ml. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. |

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**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**

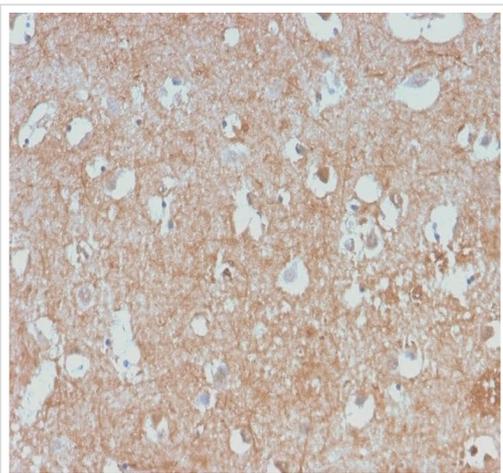
The extra mass and high charge density that distinguish the neurofilament proteins from all other intermediate filament proteins are due to the tailpiece extensions. This region may form a charged scaffolding structure suitable for interaction with other neuronal components or ions.

**Post-translational modifications**

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

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**Images**



Formalin-fixed, paraffin-embedded human cerebellum stained for neurofilament using ab270266 at 0.5 µg/ml in immunohistochemical analysis.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-68kDa Neurofilament/NF-L antibody [NEFL/2983R] (ab270266)

### Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Anti-68kDa Neurofilament/NF-L antibody  
[NEFL/2983R] (ab270266)

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

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