abcam

Product datasheet

Anti-68kDa Neurofilament/NF-L antibody [EP675Y] - BSA and Azide free ab236122

Recombinant RabMAb

1 References 2 Images

Overview

Product name	Anti-68kDa Neurofilament/NF-L antibody [EP675Y] - BSA and Azide free
Description	Rabbit monoclonal [EP675Y] to 68kDa Neurofilament/NF-L - BSA and Azide free
Host species	Rabbit
Tested applications	**Suitable for:** WB, IP
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	IP: Neurofilament/NF-L in Human brain lysate; WB: Human, rat, and mouse brain tissue lysates.
General notes	ab236122 is the carrier-free version of **ab52989**. Our **carrier-free** antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications. Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold. This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc. This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information **see here**. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EP675Y
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab236122 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 at an assay dependent concentration. Detects a band of approximately 68 kDa (predicted molecular weight: 61 kDa).
IP		Use at an assay dependent concentration.

Target

Function Neurofilaments usually contain three intermediate filament proteins: L, M, and H which are involved in the maintenance of neuronal caliber.

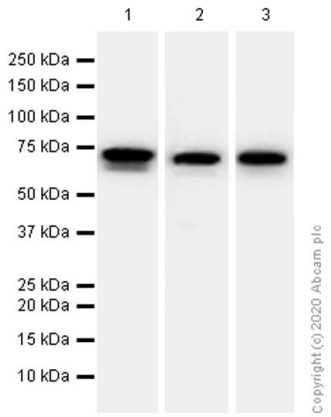
Involvement in disease Defects in NEFL are the cause of Charcot-Marie-Tooth disease type 1F (CMT1F) [MIM:607734]. CMT1F is a form of Charcot-Marie-Tooth disease, the most common inherited disorder of the peripheral nervous system. Charcot-Marie-Tooth disease is classified in two main groups on the basis 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 [EP675Y] - BSA and Azide free (ab236122)

All lanes : Anti-68kDa Neurofilament/NF-L antibody [EP675Y] (**ab52989**) at 1/1000 dilution (Purified)

Lane 1 : Human brain lysate
Lane 2 : Mouse brain lysate
Lane 3 : Rat brain lysate

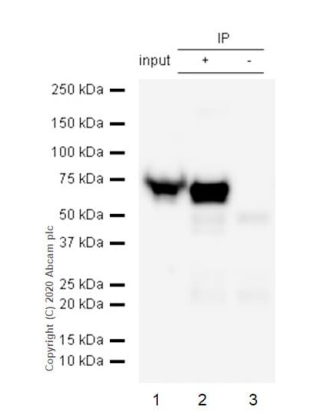
Lysates/proteins at 15 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

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

This data was developed using **ab52989**, the same antibody clone in a different buffer formulation.

Blocking buffer: 5% NFDM/TBST



Immunoprecipitation - Anti-68kDa Neurofilament/NF-L antibody [EP675Y] - BSA and Azide free (ab236122)

Purified **ab52989** at 1:20 dilution (2µg) immunoprecipitating 68kDa Neurofilament/NF-L in Human brain lysate.
Lane 1 (input): Human brain lysate 10µg
Lane 2 (+): **ab52989** + Human brain lysate.
Lane 3 (-): Rabbit monoclonal IgG (**ab172730**) instead of **ab52989** in Human brain lysate.
VeriBlot for IP Detection Reagent (HRP)(**ab131366**) (1:1000 dilution) was used for Western blotting.
Blocking Buffer and concentration: 5% NFDM/TBST.
Diluting buffer and concentration: 5% NFDM/TBST.
Observed band size: 68 kDa

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