

# **Neurofilament (ABT456) IHC kit**

CatalogNo: IHCM6897

## **| Key Features**

**Host Species** 

Mouse

Reactivity

· Human, Mouse, Rat,

**Applications** 

IHC

#### Isotype

IgG1,Kappa

### **Recommended Dilution Ratios**

### Storage

Storage\*

2°C to 8°C/1 year

## **Basic Information**

**Clonality** 

Monoclonal

**Clone Number** 

**ABT456** 

# Immunogen Information

**Immunogen** 

Synthesized peptide derived from human Neurofilament AA range: 400-543

**Specificity** 

The antibody can specifically recognize human Neurofilament protein, especilaly NF-L

protein.

## | Target Information

**Gene name** 

NEFL NF68 NFL

#### **Protein Name**

Neurofilament

Organism	Gene ID	UniProt ID
Human	<u>4747</u> ;	<u>P07196</u> ;

#### Cellular Localization

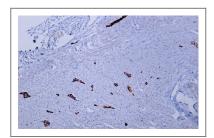
Cytoplasmic

#### Tissue specificity Cytoplasmic

#### **Function**

Caution: The sequence shown here is derived from an Ensembl automatic analysis pipeline and should be considered as preliminary data., 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)., Disease: 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., 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., Function: Neurofilaments usually contain three intermediate filament proteins: L, M, and H which are involved in the maintenance of neuronal caliber., miscellaneous: NF-L is the most abundant of the three neurofilament proteins and, as the other nonepithelial intermediate filament proteins, it can form homopolymeric 10-nm filaments., PTM: O-glycosylated., similarity: Belongs to the intermediate filament family..subunit:Interacts with RGNEF..

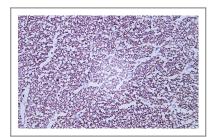
### **I** Validation Data



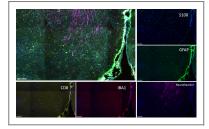
Human appendix tissue was stained with Anti-Neurofilament (ABT456) Antibody



Human cerebrum tissue was stained with Anti-Neurofilament (ABT456) Antibody



Human hippocampus tissue was stained with Anti-Neurofilament (ABT456) Antibody



Fluorescence multiplex immunohistochemical analysis of Mouse brain tissue (formalin-fixed paraffin-embedded section). The immunostaining was performed by Sextuple-Fluorescence kit (RS0039, Immunoway). GFAP mouse mAb(YM4426 Immunoway) green, S100 mouse mAb(YM6987 Immunoway) cyan,Neurofilament mouse mAb(YM6897 Immunoway) purple,Iba 1 mouse mAb(YM4765 Immunoway) red,CD8 a mouse mAb(YM4815 Immunoway) yellow, The section was incubated in 5 rounds of staining; sequentially for Anti-antibodies; each using a separate fluorescent tyramide signal amplification system. EDTA based antigen retrieval (Immunoway YS0004, pH 9.0, 20 minutes) was used in between rounds of tyramide signal amplification to remove the antibody from the previous round, to avoid any cross-reactivity. DAPI (dark blue) was used as a nuclear counter stain. Microscopy and pseudocoloring of individual dyes was performed using a Slideviewer Imaging System (Excilone).

## Contact information

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Please scan the QR code to access additional product information:

Neurofilament
(ABT456) IHC kit

For Research Use Only. Not for Use in Diagnostic Procedures.

Antibody | ELISA Kits | Protein | Reagents