

# Neurofilament (NF-L) (Neuronal Marker) Antibody - With BSA and Azide

Mouse Monoclonal Antibody [Clone NR-4] Catalog # AH11997

#### **Product Information**

Application IHC, IF, FC
Primary Accession P07196
Other Accession 4747, 521461

Reactivity Human, Rat, Pig, Chicken, Bovine

HostMouseClonalityMonoclonalIsotypeMouse / IgG1

Clone Names NR-4 Calculated MW 61517

## **Additional Information**

Gene ID 4747

Other Names Neurofilament light polypeptide, NF-L, 68 kDa neurofilament protein,

Neurofilament triplet L protein, NEFL, NF68, NFL

**Application Note** IHC~~1:100~500 IF~~1:50~200 FC~~1:10~50

**Storage** Store at 2 to 8°C.Antibody is stable for 24 months.

**Precautions** Neurofilament (NF-L) (Neuronal Marker) Antibody - With BSA and Azide is for

research use only and not for use in diagnostic or therapeutic procedures.

#### **Protein Information**

Name NEFL

Synonyms NF68, NFL

**Function** Neurofilaments usually contain three intermediate filament proteins: NEFL,

NEFM, and NEFH which are involved in the maintenance of neuronal caliber. May additionally cooperate with the neuronal intermediate filament proteins

PRPH and INA to form neuronal filamentous networks (By similarity).

Cellular Location Cell projection, axon {ECO:0000250 | UniProtKB:P08551}. Cytoplasm,

cytoskeleton {ECO:0000250 | UniProtKB:P08551}

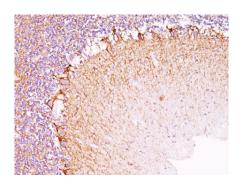
# **Background**

This MAb reacts with a 68kDa protein, identified as light sub-unit of neurofilaments (NF-L). Neurofilaments make up the main structural elements of axons and dendrites and are found in neurons, peripheral nerves, and sympathetic ganglion cells. Neurofilaments consist of three major subunits with molecular weights of 68kDa (NF-L), 160kDa (NF-M) and 200kDa (NF-H). Anti-neurofilament stains a number of neural, neuroendocrine, and endocrine tumors. Neuromas, ganglioneuromas, gangliogliomas, ganglioneuroblastomas, and neuroblastomas stain positively for anti-neurofilament. Neurofilaments are also present in paragangliomas as well as adrenal and extra-adrenal pheochromocytomas. Carcinoids, neuroendocrine carcinomas of the skin, and oat cell carcinomas of the lung also express neurofilament.

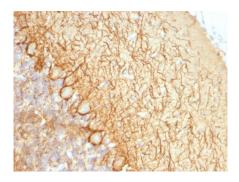
### References

Debus E., Weber K., Osborn M. Monoclonal antibodies specific for glial fibrillary acidic (GFA) protein and for each of the neurofilament triplet polypeptides. Differentiation 25 (2): 193-203, (1983). | Angelides, K.J., et. al. 1989. J. Cell Biol. 108: 1495-1506. |

# **Images**



Formalin-fixed, paraffin-embedded human Cerebellum stained with Neurofilament Monoclonal Antibody (NR-4).



Formalin-fixed, paraffin-embedded Rat Cerebellum stained with Neurofilament Monoclonal Antibody (NR-4).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.