

# Neurofilament, phospho (NF-H) (Neuronal Marker) Antibody - With BSA and Azide Mouse Monoclonal Antibody [Clone NE14] Catalog # AH11994

#### **Specification**

### Neurofilament, phospho (NF-H) (Neuronal Marker) Antibody - With BSA and Azide - Product Information

Application IHC, FC
Primary Accession P12036

Other Accession <u>4744</u>, <u>198760</u>

Reactivity Human, Mouse, Rat, Rabbit, Pig, Chicken,

Bovine, Guinea Pig, Gerbil, Cat

Host Mouse
Clonality Monoclonal
Isotype Mouse / IgG1
Calculated MW 200kDa KDa

# Neurofilament, phospho (NF-H) (Neuronal Marker) Antibody - With BSA and Azide - Additional Information

#### **Gene ID 4744**

#### **Other Names**

Neurofilament heavy polypeptide, NF-H, 200 kDa neurofilament protein, Neurofilament triplet H protein, NEFH, KIAA0845, NFH

#### **Application Note**

<span class ="dilution\_IHC">IHC $\sim$ 1:100 $\sim$ 500/span><br/>class ="dilution\_FC">FC $\sim$ 1:10 $\sim$ 50/span>

#### **Storage**

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

#### **Precautions**

Neurofilament, phospho (NF-H) (Neuronal Marker) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

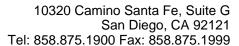
# Neurofilament, phospho (NF-H) (Neuronal Marker) Antibody - With BSA and Azide - Protein Information

#### Name NEFH

Synonyms KIAA0845, NFH

#### **Function**

Neurofilaments usually contain three intermediate filament proteins: NEFL, NEFM, and NEFH which are involved in the maintenance of neuronal caliber. NEFH has an important function in mature axons that is not subserved by the two smaller NF proteins. May additionally cooperate with the





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

#### **Cellular Location**

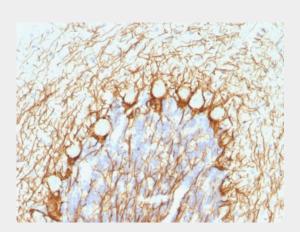
Cytoplasm, cytoskeleton. Cell projection, axon {ECO:0000250|UniProtKB:P19246}

# Neurofilament, phospho (NF-H) (Neuronal Marker) Antibody - With BSA and Azide - Protocols

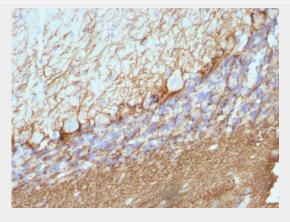
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

Neurofilament, phospho (NF-H) (Neuronal Marker) Antibody - With BSA and Azide - Images



Formalin-fixed, paraffin-embedded human Cerebellum stained with Neurofilament Monoclonal Antibody (NE14).



Formalin-fixed, paraffin-embedded Rat Cerebellum stained with Neurofilament Monoclonal Antibody (NE14).



# Neurofilament, phospho (NF-H) (Neuronal Marker) Antibody - With BSA and Azide - Background

This MAb reacts with a 200kDa protein, identified as heavy sub-unit of neurofilaments (NF-H). It reacts specifically with the phosphorylated KSP/KEP segment at the C-terminus of the heavy subunit (NF-H) of neurofilaments. After dephosphorylation of neurofilaments with alkaline phosphatase, this Ab no longer binds. 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.

# Neurofilament, phospho (NF-H) (Neuronal Marker) Antibody - With BSA and Azide - References

Debus E., et al. Differentiation 25(2), 193-203 (1983). | Gotow T., et al. J. Neuroscience Res. 37(6), 691-713 (1994). | Berglund A.M., et al. J Comp Neurol. 306(3), 393-408 (1991). | Guadano-Ferraz A., et al. Develop. Brain Res. GOTOBUTTON BM\_4\_ 56(2), 244-256, (1990). | Obermann W., et al. Eur. J. Biochem 233, 110-115 (1995). | Marx A., et al. Am. J.Pathol. 148(6), 1839-1850 (1996)