

# Neurofilament (NF-H) (Neuronal Marker); Clone RT97 (Concentrate)

## Availability/Contents:

### Item #

RA0244-C.5

### Volume

0.5 ml

## Description:

|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Species:                 | Mouse                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Immunogen:               | Triton-X 100 insoluble protein fraction of rat brain                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Clone:                   | RT97                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Isotype:                 | IgG1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Entrez Gene ID:          | 4744 (Human); 24587 (Rat)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Hu Chromosome Loc.:      | 22q12.2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Synonyms:                | NEFH; Neurofilament H; Neurofilament Heavy Polypeptide 200kDa; Neurofilament Triplet H Protein; NF-H; NF200                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Mol. Weight of Antigen:  | 200kDa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Format:                  | 200µg/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide.                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Specificity:             | This antibody reacts with a 200kDa protein, identified as the heavy subunit of neurofilaments (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. |
| Background:              | 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).                                                                                                                                                                                                                                                                     |
| Species Reactivity:      | Human, Mouse, Rat, Pig and Chicken. Others not known.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Positive Control:        | Brain, Neuroblastoma.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Cellular Localization:   | Cytoplasmic                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Titer/ Working Dilution: | Immunohistochemistry (Frozen and Formalin-fixed): 0.5-1 µg/ml<br>Flow Cytometry: 0.5-1 µg/million cells<br>Western Blotting: 0.5-1 µg/ml                                                                                                                                                                                                                                                                                                                                                                                                             |
| Microbiological State:   | This product is not sterile.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

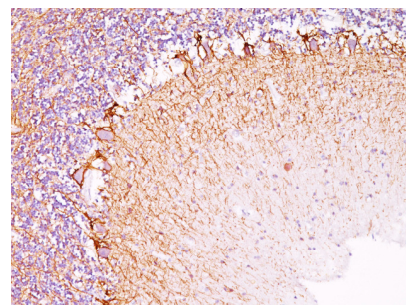
Storage: 2° C  8° C



ScyTek Laboratories, Inc.  
 205 South 600 West  
 Logan, UT 84321  
 U.S.A.

**Uses/Limitations:**

- Not to be taken internally.
- For Research Use Only.
- This product is intended for qualitative immunohistochemistry with normal and neoplastic formalin-fixed, paraffin-embedded tissue sections, to be viewed by light microscopy.
- Do not use if reagent becomes cloudy.
- Do not use past expiration date.
- Non-Sterile.



**Ordering Information and Current Pricing at** [www.scytek.com](http://www.scytek.com)

Formalin-fixed, paraffin-embedded human cerebellum stained with Neurofilament; Clone RT97.

## Procedure:

- Tissue Section Pretreatment (Required):** Staining of formalin fixed, paraffin embedded tissue sections is significantly enhanced by pretreatment with Citrate Plus (ScyTek catalog# CPL500).
- Primary Antibody Incubation Time:** We suggest an incubation period of 30 minutes at room temperature. However, depending upon the fixation conditions and the staining system employed, optimal incubation should be determined by the user.
- Visualization:** For maximum staining intensity we recommend the “UltraTek HRP Anti-Polyvalent Lab Pack” (ScyTek catalog# UHP125, see IFU for instructions) combined with the “DAB Chromogen/Substrate Bulk Pack (High Contrast)” (ScyTek catalog# ACV500, see IFU for instructions).

**Precautions:**

- Contains Sodium Azide as a preservative (0.09% w/v).
- Do not pipette by mouth.
- Avoid contact of reagents and specimens with skin and mucous membranes.
- Avoid microbial contamination of reagents or increased nonspecific staining may occur.
- This product contains no hazardous material at a reportable concentration according to U.S. 29 CFR 1910.1200, OSHA Hazardous Communication Standard and EC Directive 91/155/EC.

## References:

- Ishii M *et. al.* Fukushima J Med Sci. 2004;50(2):65-74.

## Warranty:

No products or “Instructions For Use (IFU)” are to be construed as a recommendation for use in violation of any patents. We make no representations, warranties or assurances as to the accuracy or completeness of information provided on our IFU or website. Our warranty is limited to the actual price paid for the product. ScyTek Laboratories, Inc. is not liable for any property damage, personal injury, time or effort or economic loss caused by our products. Immunohistochemistry is a complex technique involving both histological and immunological detection methods. Tissue processing and handling prior to immunostaining can cause inconsistent results. Variations in fixation and embedding or the inherent nature of the tissue specimen may cause variations in results. Endogenous peroxidase activity or pseudoperoxidase activity in erythrocytes and endogenous biotin may cause non-specific staining depending on detection system used.

Storage: 2° C  8° C



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