P.O. Box 3286 - Logan, Utah 84323, U.S.A. - Tel. (800) 729-8350 – Tel. (435) 755-9848 - Fax (435) 755-0015 - www.scytek.com

Neurofilament; Clone 2F11
(Concentrate)

Availability/Contents:

Item #	Volume
A00020-C	1 ml

Description:

Species:	Mouse
Immunogen:	BALB/C mice were immunized with purified neurofilaments from human brain.
Clone:	2F11
Isotype:	IgG1, Kappa
Format:	This antibody is provided in a phosphate buffered saline containing 1% BSA.
Specificity:	This antibody stains neurons (axons) of the central and peripheral nervous system. It is useful for the identification of tumors with neuronal differentiation viz. Neuroblastomas, Ganglioneuromas, Pheochromocytomas and Esthesioblastomas. The antibody cross-reacts with the NF-equivalent protein in mouse, rabbit, rat and swine. The antibody can also be utilized to discriminate between Hirschsprung´s disease and allied enteric nervous system malformations.
Background:	Neurofilaments (NFs) are the type IV family of intermediate filaments which are structural elements of the neuronal cytoskeleton in an interconnection with actin microfilaments, microtubules and other intermediate filaments. NFs are the most abundant fibrillar components of the axon, are built from three intertwined protofibrils which are themselves composed of two tetrameric protofilament complexes of monomeric proteins. The neurofilament triplet proteins (68/70,160, and 200 kDa) are neuron specific which are expressed in both the central and peripheral nervous system. The 68/70 kDa NF-L protein can self-assemble into a filamentous structure; however, the 160 kDa NF-M and 200 kDa NF-H proteins require the presence of the 68-/70 kDa NF-L protein to co-assemble). Alpha-internexin is also a neurofilament which is approximately 66 kDa in size. Alpha-internexin forms homopolymers and may well form a separate filament system from the other three heteropolymeric neurofilaments. Alpha-internexin is one of the earliest expressed filaments in neurons, being present in developing neuroblasts, but also in the CNS of adults. The neuron-specific nature of neurofilaments and their wide cytoplasmic distribution present themselves excellent targets for antibody markers to identify neuron in the target tissue.
Species Reactivity:	Human, Mouse, Rat, Rabbit, Cat. Does not react with Dog. Others not tested.
Positive Control:	Brain.
Cellular Localization:	Cytoplasm.
Titer/ Working Dilution:	Immunohistochemistry: 1:50-100
Microbiological State:	This product is not sterile.

Storage: 2° C 8° C

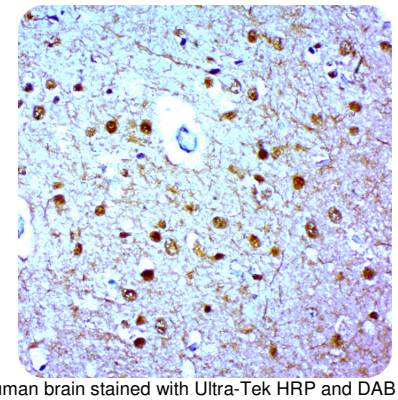
ScyTek Laboratories, Inc.
205 South 600 West
Logan, UT 84321
U.S.A.

EC REP EmergoEurope (31)(0) 70 345-8570
Molsnstraat 15
2513 BH Hague, The Netherlands

P.O. Box 3286 - Logan, Utah 84323, U.S.A. - Tel. (800) 729-8350 – Tel. (435) 755-9848 - Fax (435) 755-0015 - www.scytek.com

Uses/Limitations:

Not to be taken internally.
For In Vitro Diagnostic Use.
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.



Human brain stained with Ultra-Tek HRP and DAB Chromogen.

Ordering Information and Current Pricing at www.scytek.com

Procedure:

1. **Tissue Section Pretreatment (Highly Recommended):** Staining of formalin fixed, paraffin embedded tissue sections is significantly enhanced by pretreatment with Citrate Plus (ScyTek catalog# CPL500).

2. **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.

3. **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:

1. Schlaepfer WW. Neurofilaments: structure, metabolism and implications in disease. J Neuropathol Exp Neurol 1987;46:117-29.
2. Herrmann H, Aebi U. Intermediate filaments and their associates: multi-talented structural elements specifying cytoarchitecture and cytodynamics. Curr Opin Cell Biol 2000;12:79-90.
3. Breckenridge LJ, Sommer IU, Blackshaw SE. Developmentally regulated markers in the postnatal cervical spinal cord of the opossum *Monodelphis domestica*. Dev Brain Res 1997;103:47-57.
4. Gatter KC, Dunnill MS, van Muijen GNP, Mason DY. Human lung tumours may co-express different classes of intermediate filaments. J Clin Pathol 1986;39:950-4.

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

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

CE

EC REP EmergoEurope (31)(0) 70 345-8570
Molsnstraat 15
2513 BH Hague, The Netherlands