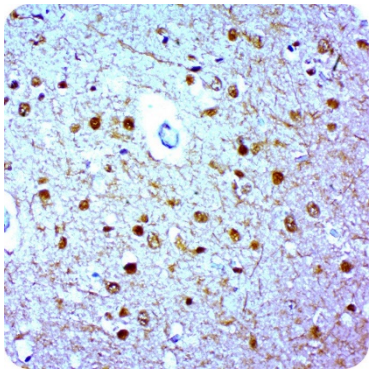
Neurofilament: Clone 2F11 (Ready-To-Use)

Description:

Species:	Mouse
Immunogen:	BALB/C mice were immunized with purified neurofilaments from human brain.
Clone:	2F11
Isotype:	IgG1, Kappa
Format:	This antibody has been pretitered and quality controlled to work on formalin-fixed paraffin-embedded as well as acetone fixed cryostat tissue sections. No further titration is required.
Specificity:	This antibody stains neurons (axons) of the central and peripheral nervous system. It is useful for the identification of tumors with neuronal differentiation such as 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:	No further dilution is required.
Microbiological State:	This product is not sterile.



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.

Procedure:

Staining of formalin fixed, paraffin embedded tissue sections is significantly enhanced by pretreatment with citrate-based antigen retrieval. 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. For maximum staining intensity, we recommend using AviBond Ultra for detection and DAB Clarity Ultra products for visualization.

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.

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. Teomics 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.