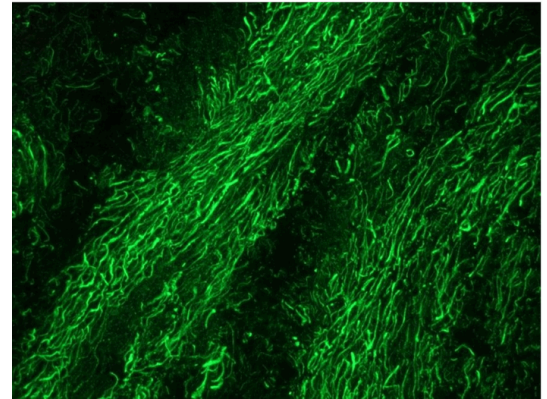


**BM6011P****Monoclonal Antibody to Neurofilament M (160 kD) - Purified**

<b>Alternate names:</b>	(Neuronal Marker), NEF3, NEFM, NF-M, Neurofilament 3, Neurofilament medium polypeptide
<b>Quantity:</b>	0.1 mg
<b>Concentration:</b>	1.0 mg/ml
<b>Background:</b>	Like most other intermediate filament proteins (IFPs), the expression of the different neuronal IFPs is both tissue-specific and developmentally regulated. The neurofilament (NF) triplet proteins (70, 160, and 200 kDa) occur in both the central and peripheral nervous system and are normally restricted to neurons. The 70 kDa NF-protein can self-assemble into a filamentous structure, whereas the 160 kDa and 200 kDa NF-proteins require the presence of the 70 kDa NF-protein to co-assemble. All three NF proteins can be detected by immunohistochemical methods at day 9 or 10 after gestation in the mouse embryo. Although IFPs of the neurofilament type are normally restricted to neurons, there are reports on their expression in non-neuronal cells as well. For example, in heart conduction myocytes NF proteins are expressed together with desmin. In tumor pathology ganglioneuroblastomas and some of the other neuroblastomas are strongly positive with the neurofilament antisera. Also, some neuro-endocrine malignancies may show NF positivity. In cell cultures of neural tissues the neurofilament antibodies can monitor in vitro differentiation.
<b>Uniprot ID:</b>	<a href="#">P07197</a>
<b>NCBI:</b>	<a href="#">NP_005373.2</a>
<b>GeneID:</b>	<a href="#">4741</a>
<b>Host / Isotype:</b>	Mouse / IgG1
<b>Recommended Isotype Controls:</b>	SM10P (for use in human samples), SM20P (for use in rat samples), AM03095PU-N
<b>Clone:</b>	RNF403
<b>Immunogen:</b>	Neurofilament preparation of calf brain tissue.
<b>Format:</b>	<b>State:</b> Liquid purified IgG fraction <b>Buffer System:</b> PBS <b>Preservatives:</b> 0.09% Sodium Azide
<b>Applications:</b>	<b>Immunoblotting.</b> <b>Immunocytochemistry/Immunofluorescence.</b> <b>Immunohistochemistry on Frozen Sections.</b> <b>Immunohistochemistry on Paraffin-Embedded Tissues.</b> <i>Recommended Dilutions:</i> 1/50-1/100 for Immunohistochemistry with avidin-biotinylated horseradish peroxidase complex (ABC) as detection reagent and for 1/100-1/500 for Immunoblotting. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

- Specificity:** RNF403 reacts exclusively with the phosphorylated isoform of the 160 kDa neurofilament protein.
- Species Reactivity:** **Tested:** Human, Hamster, Monkey, Rat and Xenopus
- Storage:** Store undiluted at 2-8°C for one month or (in small aliquots) at -20°C for longer. Avoid repeated freeze-thaw cycles. Shelf life: One year from despatch.
- General Readings:** 1. Bauwens LJ, De Groot JC, Ramaekers FC, Veldman JE, Huizing EH. Expression of intermediate filament proteins in the adult human vestibular labyrinth. *Ann Otol Rhinol Laryngol.* 1992 Jun;101(6):479-86. PubMed PMID: 1376975.

**Pictures:** Immunofluorescence staining of Rat brain Frozen Sections (Acetone fixed) with a 1/100 dilution of BM6011P (Clone RNF403) directed against the 160kD component of neurofilaments.



Immunofluorescence staining of Rat brain Frozen Sections (acetone fixed) with a 1/100 dilution of BM6011P (Clone RNF403) directed against the 160kD component of neurofilaments.

