



# Mouse Anti-Human Neurofilament 160 kD monoclonal antibody, clone SOG517 (CABT- L4646)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Specificity</b>	Reacts exclusively with the phosphorylated isoform of the 160 kD neurofilament protein. RNF406 is suitable for immunoblotting and immunohistochemistry on frozen and paraffin-embedded tissues.
<b>Immunogen</b>	This clone is a Mouse monoclonal IgG1 antibody derived by fusion of SP2/0-Ag14 Mouse myeloma cells with spleen cells from a Mouse immunized with a neurofilament preparation of calf brain tissue.
<b>Isotype</b>	IgG1
<b>Source/Host</b>	Mouse
<b>Species Reactivity</b>	Guinea Pig, Hamster, Human, Monkey, Rabbit, Rat, Xenopus
<b>Clone</b>	SOG517
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	Optimal antibody dilution should be determined by titration. Recommended range is 1:50 – 1:100 for FC, and for immunohistochemistry with avidin-biotinylated Horseradish peroxidase complex (ABC) as detection reagent, and 1:100 – 1:500 for immunoblotting applications.
<b>Format</b>	Purified, Liquid
<b>Concentration</b>	1 mg/ml
<b>Size</b>	100 µg

<b>Buffer</b>	Supplied in PBS containing 0.09% sodium azide.
<b>Preservative</b>	0.09% sodium azide
<b>Storage</b>	Short Term: 2-8°C. Long Term: -20°C. Avoid repeated freezing and thawing.
<b>Ship</b>	Wet ice

## BACKGROUND

<b>Introduction</b>	<p>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 neuroendocrine malignancies may show NF positivity. In cell cultures of neural tissues the neurofilament antibodies can monitor in vitro differentiation.</p>
<b>Keywords</b>	Neurofilaments; Neurofilament protein