



Mouse Anti-Human Neurofilament 200 kD monoclonal antibody, clone SOG516 (CABT- L4647)

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

PRODUCT INFORMATION

Specificity	Reacts exclusively with the phosphorylated isoform of the 200 kD neurofilament protein.
Immunogen	This clone is a Mouse monoclonal IgG2a 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.
Isotype	IgG2a
Source/Host	Mouse
Species Reactivity	Bovine, Canine, Chicken, Guinea Pig, Hamster, Human, Monkey, Mouse, Rabbit, Rat, Sheep, Xenopus, Zebrafish
Clone	SOG516
Conjugate	Unconjugated
Applications	This clone is suitable for immunoblotting and immunohistochemistry on frozen and paraffin-embedded tissues. Optimal antibody dilution should be determined by titration; recommended range is 1:50 – 1:100 for immunohistochemistry with avidin-biotinylated Horseradish peroxidase complex (ABC) as detection reagent, and 1:100 – 1:500 for immunoblotting applications.
Format	Purified, Liquid
Concentration	1 mg/ml
Size	100 µg
Buffer	Supplied in PBS containing 0.09% sodium azide.

Preservative	0.09% sodium azide
Storage	Short Term: 2-8°C. Long Term: -20°C. Avoid repeated freezing and thawing.
Ship	Wet ice

BACKGROUND

Introduction	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.
Keywords	Neurofilaments; Neurofilament protein