

## Monoclonal Anti- NF68 Antibody

Catalog Number: MA1070

### Description

<b>Lot No.</b>	08A12
<b>Clone</b>	NR4
<b>Size</b>	100µg/vial
<b>Form</b>	lyophilized
<b>Ig type</b>	mouse IgG1
<b>Specificity</b>	No cross reactivity with other proteins.
<b>Species</b>	Human, pig, rat
<b>Immunogen</b>	Pig spinal cord.
<b>Contents</b>	Mouse ascites fluid, 1.2% sodium acetate, 2mg BSA, with 0.01mg NaN <sub>3</sub> as preservative.

### Application

	Concentration	Tested Species	Antigen Retrieval
Western blot	1-2µg/ml	Human, Pig, Rat	-
Immunohistochemistry (Paraffin-embedded Section)	2-4µg/ml	Human, Pig, Rat	By Heat
Immunohistochemistry (Frozen Section)	2-4µg/ml	Human, Pig, Rat	-

*Other applications have not been tested.*

*Optimal dilutions should be determined by end users.*

### Preparation and storage

**Reconstitution:** 1.2% sodium acetate or neutral PBS. If 1ml of PBS is used, the antibody concentration will be 100µg/ml.

**Storage:** At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time.

Avoid repeated freezing and thawing.

## Relevant detection systems

Boster provides a series of assays reacted with primary antibodies. Antibody can be supported by chemiluminescence kit EK1001 in WB, supported by SA1021 in IHC(P) and IHC(F).

## Background

Neurofilaments are composed of 3 neuron-specific proteins with apparent molecular masses of 68 kD (NFL), 125 kD (NFM) and 200 kD (NFH) on SDS-gel electrophoresis. And they have a role in the maturation of regenerating myelinated axons. Neurofilament 68 (NF68), also called Neurofilament Protein, Light Chain (NFL). It is one of the most abundant cytoskeletal components of the neuron. Mutations in this gene were reported as a cause for autosomal dominant Charcot-Marie-Tooth type 2E (CMT2E) linked to chromosome 8p21. NFL was identified repeatedly in both screenings and found to interact with Myotubularin-related 2 gene, MTMR2 in both Schwann cells and neurons.

## Reference

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3. Previtali, S. C.; Zerega, B.; Sherman, D. L.; Brophy, P. J.; Dina, G.; King, R. H. M.; Salih, M. M.; Feltri, L.; Quattrini, A.; Ravazzolo, R.; Wrabetz, L.; Monaco, A. P.; Bolino, A. : Myotubularin-related 2 protein phosphatase and neurofilament light chain protein, both mutated in CMT neuropathies, interact in peripheral nerve. *Hum. Molec. Genet.* 12: 1713-1723, 2003.