

Monoclonal Anti-NEFH Antibody

Catalog Number: MA1071

Description

Lot No.	08A12
Clone	N52
Size	100µg/vial
Form	lyophilized
Ig type	mouse IgG1
Specificity	No cross reactivity with other proteins.
Species	Human, mouse, rat
Immunogen	C-terminal segment of enzymatically dephosphorylated pig Neurofilament 200.
Contents	Mouse ascites fluid, 1.2% sodium acetate, 2mg BSA, with 0.01mg NaN ₃ as preservative.

Application

	Concentration	Tested Species	Antigen Retrieval
Western blot	0.5µg/ml	Human, Mouse, Rat	-
Immunohistochemistry (Paraffin-embedded Section)	1-2µg/ml	Human, Mouse, Rat	By Heat
Immunohistochemistry (Frozen Section)	1-2µg/ml	Human, Mouse, 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. Genomic clones for the largest human neurofilament protein (NF-H) were isolated, the intron/exon boundaries mapped and the entire protein-coding regions (exons) sequenced. mutations in neurofilaments have been linked to some forms of Charcot-Marie-Tooth disease (CMT).

Reference

1. Lees, J. F.; Shneidman, P. S.; Skuntz, S. F.; Carden, M. J.; Lazzarini, R. A. : The structure and organization of the human heavy neurofilament subunit (NF-H) and the gene encoding it. *EMBO J.* 7: 1947-1955, 1988.
2. Brownlees, J.; Ackerley, S.; Grierson, A. J.; Jacobsen, N. J. O.; Shea, K.; Anderton, B. H.; Leigh, P. N.; Shaw, C. E.; Miller, C. C. J. : Charcot-Marie-Tooth disease neurofilament mutations disrupt neurofilament assembly and axonal transport. *Hum. Molec. Genet.* 11: 2837-2844, 2002.