



Qty: 200 µg/400 µl

Mouse anti-Neurofilament
160 kD (NF-M)

Catalog No. 13-0700

Lot No. See product label

Mouse anti-Neurofilament-160 kD (NF-M)

FORM

This monoclonal antibody is highly purified from mouse ascites by protein A chromatography. The antibody is supplied as a 400 µl aliquot at a concentration of 0.5 mg/ml in PBS containing 0.1% sodium azide (NaN₃).

CLONE: RMO-270⁽²⁾

ISOTYPE: IgG_{2a}-kappa

CLONING PARTNER: Sp/2

IMMUNOGEN: Rat neurofilaments

SPECIFICITY

This antibody reacts with the 160 kD polypeptides of human neurofilament. It specifically recognizes a phosphate-independent epitope in the tail (carboxy) domain of NF-M of most vertebrates and invertebrates.

REACTIVITY: Human

USAGE

Immunohistochemistry*:	5-10 µg/ml
Immunoblotting⁽²⁾:	0.5-1.0 µg/ml
Immunoprecipitation:	2-5 µg
ELISA:	0.1-0.5 µg/ml

*This antibody is suitable for immunohistochemical staining of Bouin's and alcohol-fixed paraffin-embedded or frozen tissue sections.

STORAGE

Store at 2-8°C for up to one month. Store at -20°C for long term storage. Do not repeatedly freeze and thaw.

BACKGROUND

Neurofilaments are intermediate (10-12nm) filaments located specifically in neurons. There are three classes of neurofilaments: NF-L (68 kDa), NF-M (160 kDa), and NF-H (200 kDa). The neurofilaments are long helical proteins which polymerize to form a rigid cytoskeleton in the neuron. This polymerized network is composed of all three filaments, and the stoichiometry of association varies during development. Neurofilaments are posttranslationally modified both by phosphorylation and glycosylation. Like other intermediate filament proteins, phosphorylation likely mediates neurofilament dynamics. However, how O-linked N-acetylglucosamine residues function to modify neurofilament function remains unclear.

(cont'd)

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PI130700

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REFERENCES

1. Lee VM-Y, et al; J Neurosci 7, 3474-3488 (1987).
2. Pleasure SJ et al; J Neurosci 10:2428-2437 (1990).
3. Carden MJ et al; J Neurosci 7:3489-3504 (1987).
4. Trojanowski JQ et al; Brain Pathol 3:45-54 (1993).
5. Trojanowski JQ et al; Molec Chem Neuropath 17:121-135 (1992).
6. Schmidt ML et al; Lab Invest, 56:282-294 (1987).
7. Schmidt ML et al; Am J Pathol 139: 53 (1991).
8. Schmidt ML et al; Am J Pathol 136:1069 (1990).

RELATED PRODUCTS

<u>Product</u>	<u>Clone/PAD</u>	<u>Cat. No.</u>
Ms x Neurofilament-68 kD (NF-L)	DA2	13-0400
Ms x Neurofilament (NF-L+H)	ZCN37	18-0041
Ms x Neurofilament-160/200 kD (NF-M+H)	RMdO-20	13-1300
Ms x Neurofilament-200 kD (NF-H)	RMO-24	13-1000
Ms x Neurofilament-L+M+H (PAN)	RMO-24	18-0171
Ms x Neurofilament-160 kD (NF-M)	RMO-44	13-0500
Ms x Neurofilament-160 kD (NF-M)	RMO-281	13-0800
<u>Product</u>	<u>Conjugate</u>	<u>Cat. No.</u>
Goat anti-Mouse IgG (H+L) (ZyMAX™ Grade)	Purified	81-6500
	FITC	81-6511
	TRITC	81-6514
	Cy™3	81-6515
	Cy™5	81-6516
	HRP	81-6520
	AP	81-6522
	Biotin	81-6540
Protein A	Sepharose® 4B	10-1041
rec-Protein G	Sepharose® 4B	10-1241

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