



Qty: 200 µg/400 µl

Mouse anti-Neurofilament
160 kD (NF-M)

Catalog No. 13-0500

Lot No. See product label

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

FORM

Liquid. Purified antibody is supplied in PBS containing 0.1% sodium azide (NaN₃) at a concentration of 0.5 mg/ml.

CLONE: RMO-44⁽³⁾

ISOTYPE: IgG₁, kappa

CLONING PARTNER: Sp/2

IMMUNOGEN: Rat neurofilaments

SPECIFICITY

This antibody reacts with the 160 kD polypeptides of human neurofilament. It specifically recognize a phosphate-independent epitope in the rod (core) domain of NF-M.^(1,2) Reactivity with lampey NF-M has also been shown.

USAGE

Immunohistochemistry*:	5-10 µg/ml
Immunoblotting⁽¹⁾:	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 repeated freeze and thaw.

BACKGROUND

Neurofilament proteins (NFPs) are a macromolecular complex comprised of 3 polypeptides designated as NF-L, NF-M and NF-H. NFPs are found in the perikarya, particularly in neuronal axons throughout the central and peripheral nervous system. Since NFPs are major structural proteins and biochemically quite stable, antibodies to NFPs are useful probes in studies of neuronal expression, morphology, connectivity and pathology. The presence or absence of NFP in a variety of nervous system or neuroendocrine tumors can provide useful information about the original cell type of the tumor. In addition, the normal NFP staining pattern is altered in a variety of human diseases including Alzheimer's disease, diffuse cortical Lewy body disease, Parkinson's disease and amyotrophic lateral sclerosis (Lou Gehrig' disease). Alterations in the NFP expression pattern are also seen in most toxin-induced, sporadic and hereditary axonopathies occurring in humans and animals.

(cont'd)

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REFERENCES

1. Pleasure SJ et al; *J Neurosci* 9:698-709 (1989)
2. Trojanowski JQ et al; *Molec Chem Neuropath* 17:121-135 (1992)
3. Lee VM-Y et al; *J Neurosci* 7:3474-3488 (1987)
4. Trojanowski JQ et al; *Brain Pathol* 3:45-54 (1993)
5. Schmidt ML et al; *Am J Pathol* 136:1069 (1990)
6. Schmidt ML et al; *Am J Pathol* 139:53 (1991)
7. Carden MJ et al; *J Neurosci* 7:3489-3504 (1987)

RELATED PRODUCTS

<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 rec-Protein G	Sepharose® 4B	10-1041
	Sepharose® 4B	10-1241

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