Qty: 100 µg/200 µl

Mouse anti-Alpha-Internexin

Catalog No. 32-3600

Lot No. See product label

Mouse anti-Alpha-Internexin

FORM
This monoclonal antibody is supplied as a 200 µl aliquot at a concentration of 0.5 mg/ml in phosphate buffered saline, pH 7.4, containing 0.1% sodium azide (NaN_3). The antibody is purified from mouse ascites fluid.

CLONE: 2E3 **ISOTYPE:** Mouse IgG_1

IMMUNOGEN
Full-length recombinant rat alpha-internexin protein

SPECIFICITY
This antibody is specific for the 66 kDa alpha-internexin protein.

REACTIVITY
This antibody reacts with human, mouse, rabbit, and rat. Reactivity with other species has not been tested. 2E3 antibody has stained human neuron and nerve fiber in human cerebral cortex. It has also stained glioma, ganglioneuroma, pheochromocytoma, and paraganglioma in human tissue.

Sample	ELISA	IHC (frozen tissue)	IHC (paraffin tissue)	Western Blotting	Immuno-fluorescence
Human	+	+	+	+	+
Mouse	+	+	+	+	+
Rabbit	+	+	+	+	+
Rat	+	+	+	+	+

USAGE
Working concentrations for specific applications should be determined by the investigator. Appropriate concentrations will be affected by several factors, including secondary antibody affinity, antigen concentration, sensitivity of detection method, temperature and length of incubations, etc. The suitability of this antibody in applications other than those listed below has not been evaluated. The following concentration ranges are recommended starting points for this product.

ELISA: 0.1 µg/ml
Western Blotting: 0.1 – 0.5 µg/ml
Immunohistochemistry (FFPE)*: 1-5 µg/ml

* Pretreat FFPE tissues with HIER using citrate buffer, pH 6.

STORAGE
Store at 2-8°C for up to one month. Store at –20°C for long term storage. Avoid repeated freezing and thawing.

(cont'd)

BACKGROUND

Alpha-internexin is a, 66 kDa, type IV intermediate filament protein[1] that is expressed in neurons during development of the peripheral and central nervous systems, as well as in a few neurons of the adult central nervous system.[2] Recent studies have demonstrated that during neuronal development, alpha-internexin replaces type VI nestin and type III vimentin intermediate filament proteins.[3] Clinical studies have also demonstrated that alpha-internexin may play a role in the development of neuronal polarity.[4]

REFERENCES

1. Pachter JS, Liem RK. Alpha-Internexin, a 66-kD intermediate filament-binding protein from mammalian central nervous tissues. *J Cell Biol.* 101(4):1316-22 (1985).
2. Kaplan, M.P., et. al. Alpha-internexin, a novel neuronal intermediate filament protein, precedes the low molecular weight neurofilament protein (NF-L) in the developing rat brain. *J Neurosci*. 10(8):2735-2748 (1990).
3. Steinert P.M., et al. Molecular parameters of type IV alpha-internexin and type IV-type III alpha-internexin-vimentin copolymer intermediate filaments. *J Biol Chem.* 274(3):1657-1666 (1999).
4. Shea T.B., Beermann M.L. Neuronal intermediate filament protein alpha-internexin facilitates axonal neurite elongation in neuroblastoma cells. *Cell Motil Cytoskeleton.* 43(4):322-333 (1999).

RELATED PRODUCTS

Product	***Conjugate***	***Cat. No.***
Goat anti-Mouse IgG (H+L)	Purified	81-6500
(ZyMAX™ Grade)	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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