

Datasheet for ABIN94435

anti-NEFM antibody

4 Images

1 Publication

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Overview

Quantity:	0.1 mg
Target:	NEFM
Reactivity:	Mammalian
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This NEFM antibody is un-conjugated
Application:	Western Blotting (WB), Immunocytochemistry (ICC), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

Product Details

Immunogen:	Pellet of porcine brain cold stable proteins after depolymerization of microtubules.
Clone:	NF-09
Isotype:	IgG2a
Specificity:	The antibody NF-09 reacts with both phosphorylated and non-phosphorylated form of medium neurofilament protein (160 kDa intracellular antigen) of various species.
Cross-Reactivity (Details):	Mammalian
Purification:	Purified by protein-A affinity chromatography.
Purity:	> 95 % (by SDS-PAGE)

Target Details

Target:	NEFM
Alternative Name:	Neurofilament medium protein (NEFM Products)
Background:	<p>Neurofilament medium, Neurofilaments (NFs) are a type of intermediate filament (IF) expressed almost exclusively in neuronal cells, and in those cells most prominently in large axons. NFs in most vertebrates are composed of three different polypeptide chains with different molecular weights – , neurofilament heavy protein (NF-H), medium (NF-M) and light protein (NF-L), which share sequence and structural similarity in a coiled-coil core domain, but differ in the length and sequence of their N-termini and more dramatically of their C-termini which in the case of NF-M and NF-H form the flexible extensions that link NFs to each other and to other elements in the cytoplasm. The protein segment on the C-terminal side of the human NF-H rod is uniquely long (more than 600 amino acids) compared to other IF proteins and is highly charged (> 24 % Glu, > 25 % Lys), rich in proline (> 12 %) and impoverished in cysteine, methionine and aromatic amino acids. Its most remarkable feature is a repetitive sequence that covers more than half its length and includes the sequence motif Lys-Ser-Pro (KSP) greater than 40 times. Plasma neurofilament heavy chain level has been proposed as a marker of axonal injury and clinical use of its degeneration and loss has been suggested as a biomarker of several neurodegenerative diseases.,NFM, NEFM, Neurofilament medium chain, NEF3</p>
Gene ID:	4741
UniProt:	P07197
Pathways:	Brown Fat Cell Differentiation

Application Details

Application Notes:	<p>Immunocytochemistry: Positive tissue: Neuro2A murine cell line, Carnoys fixative 2 x 3 min, blocking 1 % glycine + 0.2 % gelatin 10 min.</p> <p>Western blotting: Recommended dilution: 1-2 µg/mL.</p>
Restrictions:	For Research Use only

Handling

Concentration:	1 mg/mL
Buffer:	Phosphate buffered saline (PBS), pH 7.4, 15 mM sodium azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which

Handling

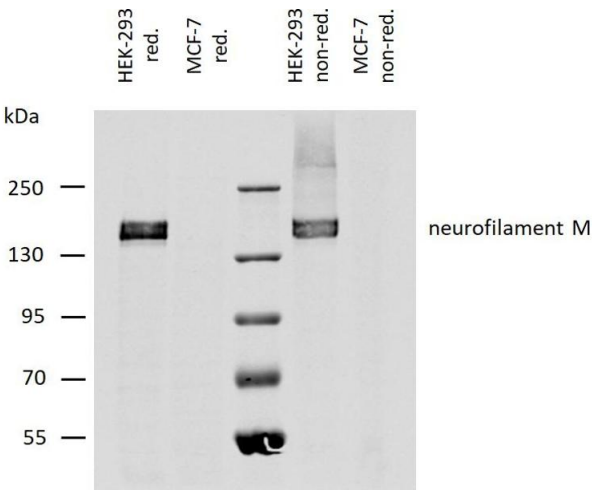
should be handled by trained staff only.

Handling Advice:	Do not freeze.
Storage:	4 °C
Storage Comment:	Store at 2-8°C. Do not freeze.

Publications

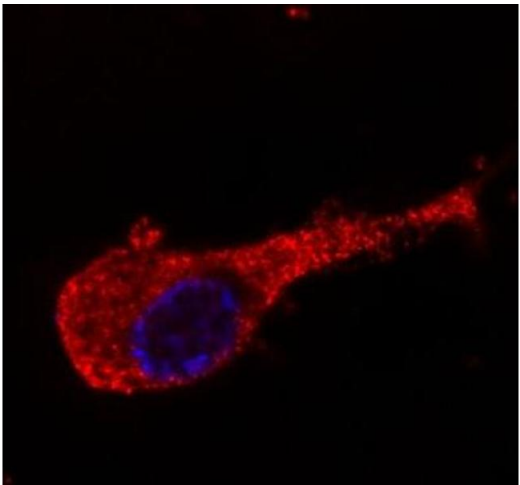
Product cited in:	Dráberová, Sulimenko, Kukharsky, Dráber: "Monoclonal antibody NF-09 specific for neurofilament protein NF-M." in: Folia biologica , Vol. 45, Issue 4, pp. 163-5, (2000) (PubMed).
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Images



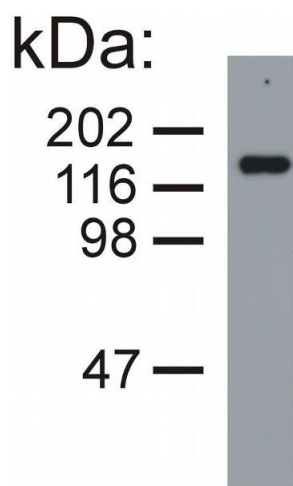
Western Blotting

Image 1. Western blotting analysis of human neurofilament M protein using mouse monoclonal antibody NF-09 on lysates of HEK-293 cell line, and MCF-7 cell line (neurofilament non-expressing cell line, negative control) under reducing and non-reducing conditions. Nitrocellulose membrane was probed with 2 µg/mL of mouse anti-neurofilament M monoclonal antibody followed by IRDye800-conjugated anti-mouse secondary antibody. Neurofilament M was detected around 160 kDa.



Immunofluorescence

Image 2. Immunofluorescence staining of neurofilament medium protein in murine Neuro2A cells by antibody conjugated with Dyomics 547 (red). DNA stained by Hoechst (blue)



Western Blotting

Image 3. Western blotting analysis of neurofilament medium protein in porcine brain lysate (reducing conditions) by mouse monoclonal NF-09.

Please check the [product details page](#) for more images. Overall 4 images are available for ABIN94435.