

Mouse monoclonal antibody to Internexin alpha [1D2]

Catalogue No.: M-1378-250

Description: Neurofilaments can be defined as the intermediate or 10nm diameter filaments found in

neuronal cells. They are composed a mixture of subunits which often includes the neurofilament triplet proteins, NF-L, NF-M and NF-H. Neurofilaments may also include peripherin, alpha-internexin, nestin and in some cases vimentin. Alpha-internexin is a ~66 kDa Class IV intermediate filament subunit expressed in large amounts early in neuronal development, but is downregulated in many neurons as development procedes. Many classes of mature neurons contain alpha-internexin in addition to NF-L, NF-M and NF-H. In some mature neurons alpha-internexin is the only neurofilament subunit expressed. Antibodies to alpha-internexin are therefore unique probes to study and classify neuronal types and follow their processes in sections and in tissue culture. In addition the very early developmental expression of alpha-internexin means its presence is an early and convenient diagnostic feature of neuronal progenitors cells and other cell committed to the neuronal lineage.

Batch No.: See product label

Unit size: 250 µl

Antigen: Recombinant rat alpha-internexin expressed and purified from E. coli

Antibody Type: Monoclonal

Isotype: IgG1
Clone: 1D2

Other Names: 66 kDa neurofilament protein; NF-66; Neurofilament-66; Alpha-internexin; Alpha-Inx;

Neurofilament 5; INA; NEF5;

Accession: Q16352 AINX_HUMAN; P23565 AINX_RAT;

Produced in: Mouse

Applications: Western Blotting (WB), Immunocytochemistry (IC) and Immunohistochemistry on paraffin

sections (IHC). The recommended dilution for WB is 1:5000-10,000. The epitope recognised by this antibody is in the C-terminal non-helical extension of the protein and is unusually resistant to aldehyde fixation so this antibody is ideally suited for studies of paraffin embedded formalin fixed histological sections. The recommended dilution for IHC is 1:1,000-5,000. For IC, dilution is 1:250-500. Biosensis recommends optimal dilutions/concentrations should be determined by

the end user.

Specificity: The specificity of this antibody has been confirmed by WB. This antibody is specific for the

64-66 kDa alpha-internexin protein. Molecular weight will depend on species.

Antibody Against: Internexin alpha

Cross-reactivity: Hu, Rat, Ms, Fel, and other mammals

Form: Lyophilised with 5% trehalose

Appearance: White powder

Reconstitution: Reconstitute in sterile distilled water. Centrifuge to remove any insoluble material.

Storage: After reconstitution of lyophilised antibody, aliquot and store at -20°C for a higher stability.

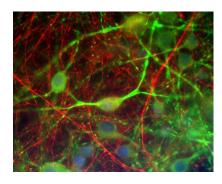
FOR RESEARCH USE ONLY



Mouse monoclonal antibody to Internexin alpha [1D2]

Avoid freeze-thaw cycles.

Expiry Date: 12 months after purchase



Mixed cultures of rat CNS cells stained with Mouse monoclonal antibody to Internexin alpha [1D2] M-1378-250 (red) and Chicken polyclonal antibody to Microtubule associated protein 2 C-1382-50 (green). The internexin alpha is localized primarily in neuronal axons in these cultures, while the perikarya and dendrites of neurons stain strongly for MAP2.

