10320 Camino Santa Fe, Suite G
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Tel: 858.875.1900 Fax: 858.875.1999

Anti-Alpha Internexin/ NF-66 Antibody

Our Anti-Alpha Internexin/ NF-66 primary antibody from PhosphoSolutions is mouse monoclonal. It dete

Catalog # AN1303

Specification

Anti-Alpha Internexin/ NF-66 Antibody - Product Information

Application	**WB, IHC**
Primary Accession	P23565
Reactivity	**Bovine**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgG1**
Calculated MW	**56115**

Anti-Alpha Internexin/ NF-66 Antibody - Additional Information

Other Names
66 kDa neurofilament protein antibody, AINX_HUMAN antibody, Alpha Inx antibody, Alpha-internexin antibody, Alpha-Inx antibody, INA antibody, Internexin neuronal intermediate filament protein alpha antibody, MGC12702 antibody, NEF 5 antibody, NEF5 antibody, Neurofilament 5 (66kD) antibody, Neurofilament 5 antibody, Neurofilament 66 antibody, Neurofilament 66 tax binding protein antibody, Neurofilament-66 antibody, NF 66 antibody, NF-66 antibody, NF66 antibody, TXBP 1 antibody, TXBP1 antibody

Target/Specificity
Alpha-internexin is a Class IV intermediate filament originally discovered as it co-purifies with other neurofilament subunits (1). Alpha-internexin is related to but distinct from the better known neurofilament triplet proteins, NF-L, NF-M and NF-H, having similar protein sequence motifs and a similar intron organization. It is expressed only in neurons and in large amounts early in neuronal development, but is down-regulated in many neurons as development proceeds. Many classes of mature neurons contain alpha-internexin in addition to NF-L, NF-M and NF-H. In some mature neurons alphainternexin 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, recent studies show a marked up-regulation of alpha-internexin during neuronal regeneration (2). The use of antibodies to this protein in the study of brain tumors has not been examined to date, but is likely to be of interest. Recently Cairns et al. used this antibody to show that alphainternexin is an abundant component of the inclusions of neurofilament inclusion body disease (NFID), a serious human neurodegenerative disorder (3,4). The antibody was also used to confirm the presence of circulating auto-antibodies to alpha-internexin in the sera of some patients with endocrine autoimmunity, as well as in some normal individuals (5).

Dilution
WB~~1:1000
IHC~~1:100~500

Format
Protein G purified

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Anti-Alpha Internexin/ NF-66 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

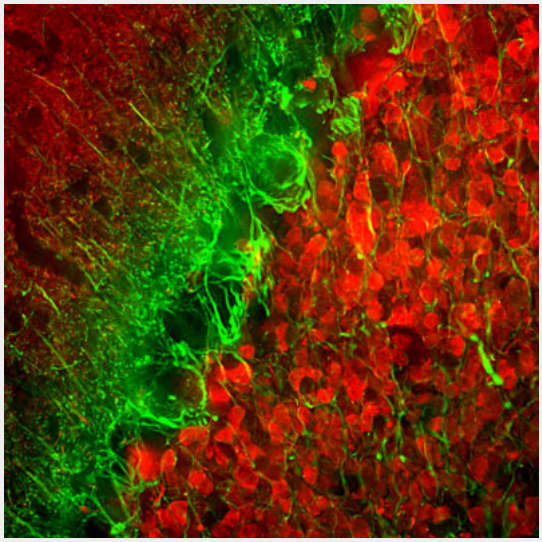
Shipping
Blue Ice

Anti-Alpha Internexin/ NF-66 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Alpha Internexin/ NF-66 Antibody - Images



Immunofluorescence of a section of rat cerebellum selectively labeling the axons of granule cells with alpha-internexin (cat. 100-AIN, 1:5000, green) and colabeled with anti-calretinin (red).

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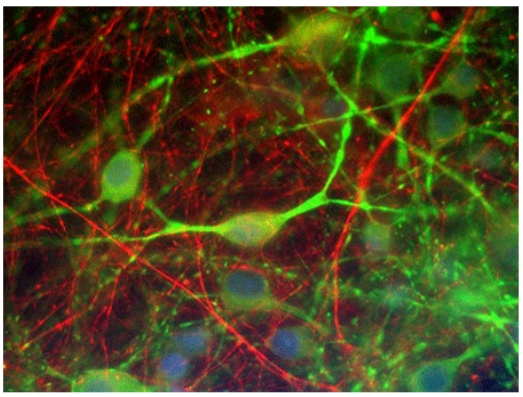
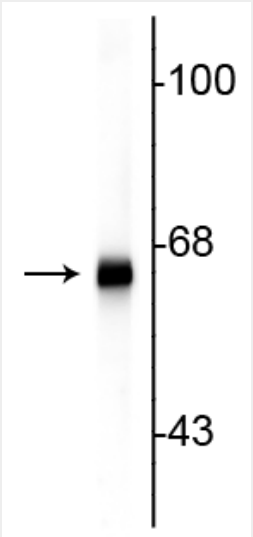


Immunofluorescence of cultured rat CNS cells showing specific labeling of neuronal processes with Anti-alpha-internexin (cat. 100-AIN, 1:250, red), and specific labeling of perikarya and dendrites with anti-microtubule associated protein 2 (cat. 1100-MAP2,1:2,500,green).



Western blot of rat cortex lysate showing specific immunolabeling of the ~66 kDa alpha internexin protein.

Anti-Alpha Internexin/ NF-66 Antibody - Background

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