

## Anti-Alpha Internexin/ NF-66 Antibody

Our Anti-Alpha Internexin/ NF-66 primary antibody from PhosphoSolutions is chicken polyclonal. It de Catalog # AN1304

### **Specification**

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

Application Primary Accession Reactivity Host Clonality

Isotype Calculated MW WB, IHC
P23565
Bovine, Chicken
Chicken
Polyclonal

lgY 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, NF 66 antibody, NF-66 antibody, NF-66 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**

Total IgY fraction





## **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**

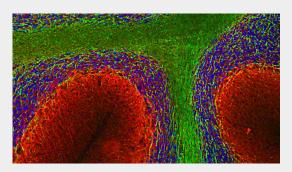
Blue Ice

# Anti-Alpha Internexin/ NF-66 Antibody - Protocols

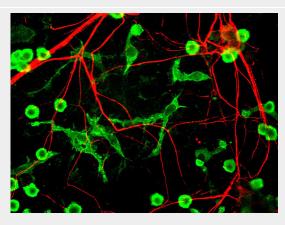
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# Anti-Alpha Internexin/ NF-66 Antibody - Images

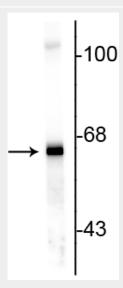


Immunofluorescence of a section of rat cerebellum showing labeling of axons of granule cell and dendrites of Purkinje with alpha-internexin (cat. 101-AIN, 1:5000, red), labeling of the myelin sheaths around the axons with MBP (cat. 1120-MBP, 1:5000, green), and additional nuclear staining with DAPI (blue).





Immunofluorescence of cultured neurons and glia cells showing specific labeling of neuronal processes with Anti-alpha-internexin (cat. 101-AIN, 1:500, red), and specific labeling of microglia with anti-coronin 1a (green).



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

### Anti-Alpha Internexin/ NF-66 Antibody - Background

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