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Anti-Alpha Internexin/ NF-66 Antibody

Our Anti-Alpha Internexin/ NF-66 primary antibody from PhosphoSolutions is mouse monoclonal. It dete
Catalog # AN1303

Product Information

Application	WB, IHC, ICC
Primary Accession	P23565
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Clone Names	1D2
Calculated MW	56115

Additional Information

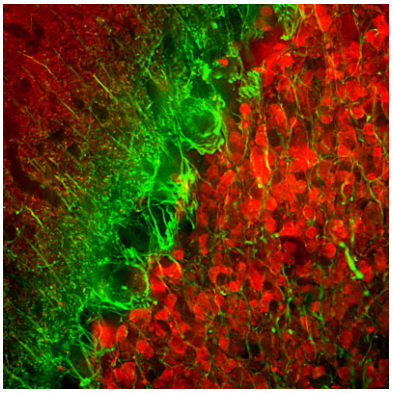
Other Names	66 kDa neurofilament protein antibody, AINX_HUMAN antibody, Alpha Inx antibody, Alpha-internexin antibody, Alpha-Inx antibody, INA antibody, Internexin neuronal intermediate filament protein alpha antibody, MGC12702 antibody, NEF 5 antibody, NEF5 antibody, Neurofilament 5 (66kD) antibody, 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 ICC~~N/A
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

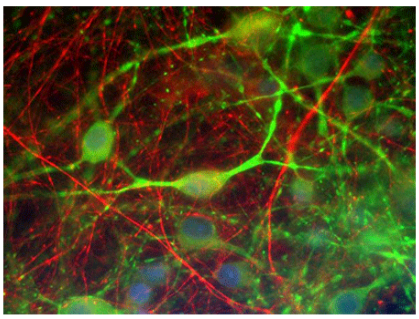
Background

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Images

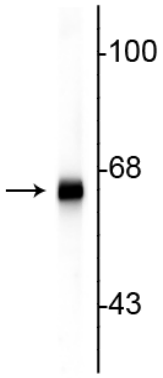


Immunofluorescence of a section of rat cerebellum selectively labeling the axons of granule cells with alpha-internexin (cat. AN1303, 1:5000, green) and colabeled with anti-calretinin (red).



Immunofluorescence of cultured rat CNS cells showing specific labeling of neuronal processes with Anti-alpha-internexin (cat. AN1303, 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.



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.