

## ARG52220 anti-NF66 / alpha Internexin antibody [ID2]

Package: 100 µl  
Store at: -20°C

### Summary

Product Description	Mouse Monoclonal antibody [ID2] recognizes NF66 / alpha Internexin
Tested Reactivity	Hu, Ms, Rat, Cat, Cow, Pig
Tested Application	ICC/IF, IHC-Fr, WB
Host	Mouse
Clonality	Monoclonal
Clone	ID2
Isotype	IgG1
Target Name	NF66 / alpha Internexin
Immunogen	Purified recombinant Rat Alpha Internexin expressed in and purified from E. coli.
Conjugation	Un-conjugated
Alternate Names	Neurofilament 5; Neurofilament-66; Alpha-Inx; NEF5; NF-66; Alpha-internexin; 66 kDa neurofilament protein; TXBP-1

### Application Instructions

Application table	Application	Dilution
	ICC/IF	1:5000
	IHC-Fr	1:5000
	WB	1:10000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

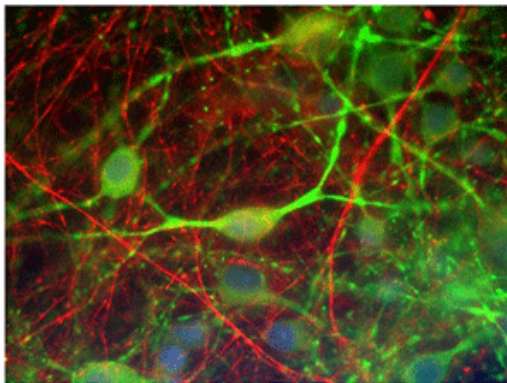
### Properties

Form	Liquid
Purification	Affinity purification.
Buffer	PBS and 50% Glycerol.
Stabilizer	50% Glycerol
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

## Bioinformation

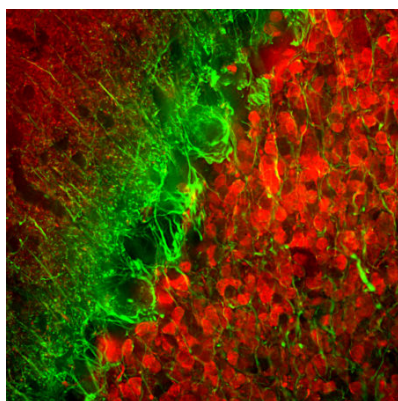
Gene Symbol	INA
Gene Full Name	internexin neuronal intermediate filament protein, alpha
Background	Alpha-internexin is a Class IV intermediate filament originally discovered as it co-purifies with other neurofilament subunits. Alpha-internexin is related to but distinct from the better known neurofilament 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 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, recent studies show a marked up-regulation of alpha-internexin during neuronal regeneration. 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 alpha-internexin is an abundant component of the inclusions of neurofilament inclusion body disease (NFID), a serious human neurodegenerative disorder. 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.
Research Area	Neuroscience antibody
Calculated Mw	55 kDa
PTM	O-glycosylated.

## Images



ARG52220 anti-NF66 / alpha Internexin antibody [ID2] ICC/IF image

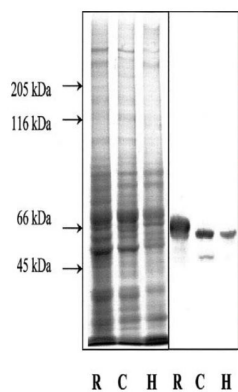
Immunofluorescence: Mixed cultures of Rat CNS cells stained with ARG52220 anti-NF66 / alpha Internexin antibody [ID2] (red) and ARG52328 anti-Microtubule Associated Protein 2 (MAP2) antibody (green).



ARG52220 anti-NF66 / alpha Internexin antibody [ID2] IHC-Fr image

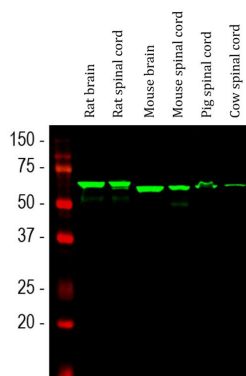
Immunohistochemistry: Frozen section of Rat cerebellum stained with ARG52220 anti-NF66 / alpha Internexin antibody [ID2] (green) at 1:5000 dilution and costained with [ARG10680](#) anti-Calretinin antibody (red) at 1:2000 dilution. (Sample preparation: Following transcardial perfusion of Rat with 4% paraformaldehyde, brain was post fixed for 24 hours, cut to 45  $\mu$ M, and free-floating sections were stained with the above antibodies.)

The alpha Internexin antibody selectively stains neuronal processes, in particular parallel fibers, the axons of granule cells. Calretinin antibody stains interneurons predominantly in the molecular layer of the cerebellum.



ARG52220 anti-NF66 / alpha Internexin antibody [ID2] WB image

Western blot: Left three lanes show Coomassie brilliant blue stained extracts of Rat brain stem, Cat cerebral cortex and Human cerebral cortex (R, C and H respectively). Right three lanes are corresponding blots stained with ARG52220 anti-NF66 / alpha Internexin antibody [ID2].



ARG52220 anti-NF66 / alpha Internexin antibody [ID2] WB image

Western blot: Rat brain, Rat spinal cord, Mouse brain, Mouse spinal cord, Pig spinal cord and Cow spinal cord lysates stained with ARG52220 anti-NF66 / alpha Internexin antibody [ID2] (green) at 1:10000 dilution.