

## Basic Information

<b>Product Name</b>	Anti-Alpha Internexin/INA Antibody	
<b>Gene Name</b>	INA	
<b>Source</b>	Rabbit	
<b>Clonality</b>	Polyclonal	
<b>Isotype</b>	IgG	
<b>Species Reactivity</b>	human, mouse, rat	
<b>Tested Application</b>	WB, IHC, IF, ICC/IF, FCM, ELISA	
<b>Contents</b>	500 ug/ml antibody with PBS, 0.02% NaN3, 1 mg/ml BSA and 50% glycerol.	
<b>Immunogen</b>	E.coli-derived human INA recombinant protein (Position: L62-D169).	
<b>Concentration</b>	500 ug/ml	
<b>Purification</b>	Immunogen affinity purified.	
<b>Observed MW</b>	62-66 kDa	
<b>Dilution Ratios</b>	Western blot (WB):	1:500-2000
	Immunohistochemistry (IHC):	1:50-400
	Immunofluorescence (IF):	1:50-400
	Immunocytochemistry/Immunofluorescence (ICC/IF):	1:50-400
	Flow Cytometry (Fixed):	1:50-200
	Enzyme linked immunosorbent assay (ELISA):	1:100-1000
	(Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

## Storage

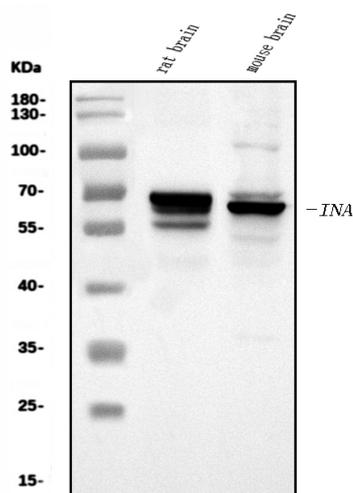
12 months from date of receipt, -20°C as supplied.

## Background Information

Alpha-Internexin (INA; also NF-66) is a 66 kDa member of the intermediate filament (IF) protein family. The protein was originally purified from rat optic nerve and spinal cord. And the protein copurifies with other neurofilament subunits, as it was originally discovered, however in some mature neurons it can be the only neurofilament expressed. The protein is present in developing neuroblasts and in the Central Nervous System of adults. Meanwhile, the protein is a major component of the intermediate filament network in small interneurons and cerebellar granule cells, where it is present

in the parallel fibers.

## Selected Validation Data



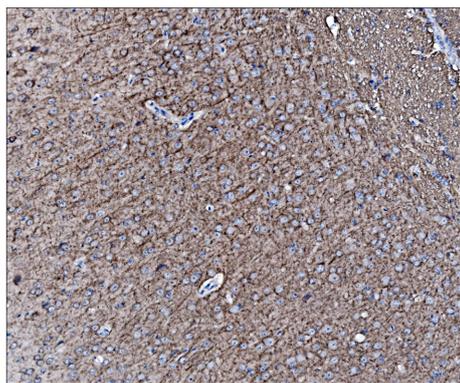
Western blot analysis of Alpha Internexin/INA using anti-Alpha Internexin/INA antibody (A03756-1). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: rat brain tissue lysates,

Lane 2: mouse brain tissue lysates.

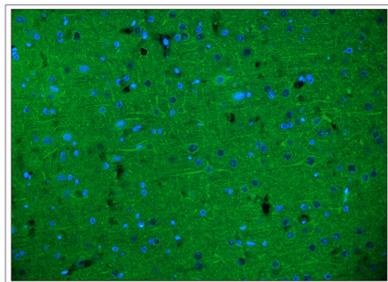
After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-Alpha Internexin/INA antigen affinity purified polyclonal antibody (A03756-1) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for Alpha Internexin/INA at approximately 62-66 kDa. The expected band size for Alpha Internexin/INA is at 55 kDa.

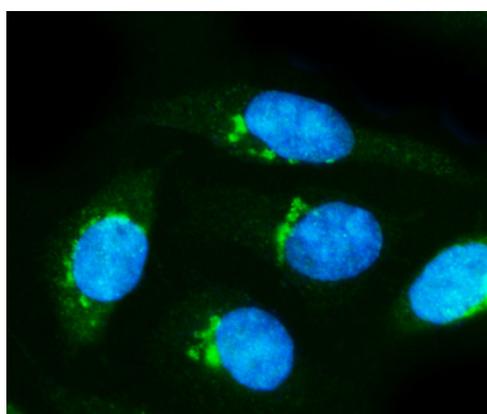


IHC analysis of Alpha Internexin/INA using anti-Alpha Internexin/INA antibody (A03756-1).

Alpha Internexin/INA was detected in a paraffin-embedded section of mouse brain tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-Alpha Internexin/INA Antibody (A03756-1) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.

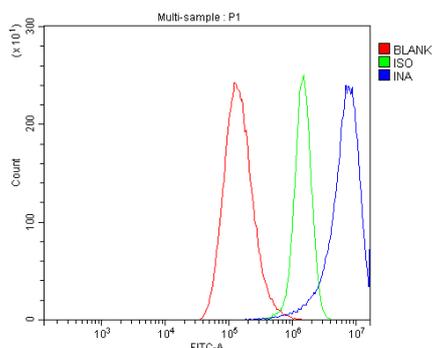


IF analysis using anti- INA Antibody (A03756-1). was detected in immersion fixed rat brain tissue. Cells were stained using the Fluoro488-conjugated Anti-rabbit IgG Secondary Antibody (green)(Catalog # BA1127) and counterstained with DAPI (blue).



ICC/IF analysis of Alpha Internexin/INA using anti-Alpha Internexin/INA antibody (A03756-1).

Alpha Internexin/INA was detected in an immunocytochemical section of SiHa cells. The section was incubated with rabbit anti-Alpha Internexin/INA Antibody (A03756-1) at a dilution of 1:100. Fluoro488 Conjugated Goat Anti-Rabbit IgG (Green) (Catalog # BA1127) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).



Flow Cytometry analysis of A549 cells using anti-Alpha Internexin/INA antibody (A03756-1).

Overlay histogram showing A549 cells stained with A03756-1 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Alpha Internexin/INA Antibody (A03756-1) at 1:100 dilution for 30 min at 20°C. Fluoro488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.