Datasheet for ABIN6658126

anti-INA antibody

2 Images

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Overview

Quantity:	100 µL
Target:	INA
Reactivity:	Rat
Host:	Chicken
Clonality:	Polyclonal
Conjugate:	This INA antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), ELISA, Fluorescence Microscopy (FM), Multiplex Assay (MA)

Product Details

Purpose:	Alpha Internexin Antibody
Immunogen:	Anti-Alpha Internexin Antibody was produced by repeated immunizations with recombinant rat alpha internexin expressed in E. coli.
Isotype:	IgG
Cross-Reactivity (Details):	Anti-Alpha Internexin Antibody is directed against rat Alpha Internexin proteins.
Purification:	The antibody was purified from chicken eggs as an IgY fraction.

Target Details

Target:	INA
Alternative Name:	Alpha Internexin (INA Products)

Target Details

Background:	Synonyms: Alpha INX, internexin, NF-66, NEF5 Background: Anti-Alpha Internexin antibody recognizes alpha-internexin which 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. Anti-Alpha Internexin antibody is ideal for investigators involved in Cell Signaling, Neuroscience, Signal Transduction research. Gene Name: INA
Gene ID:	24503
UniProt:	P23565

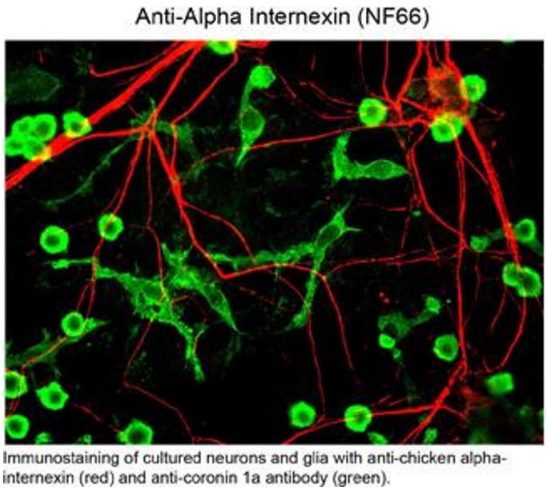
Application Details

Application Notes:	ELISA_Dilution: 1:50,000 IF_Microscopy_Dilution: 1:500 Western_Blot_Dilution: 1:5000
Comment:	Anti-Alpha Internexin antibody is tested for use in Western Blotting and ICC, and IHC. Specific conditions for reactivity should be optimized by the end user. Expect a band of approximately 66 kDa in size corresponding to the alpha internexin protein in Western blots in the appropriate cell lysate or extract. Minor bands at ~150k are probably covalent dimers and bands at ~50k represent alpha-internexin breakdown products.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	Optional[Buffer]: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 ,0.01 % (w/v) Sodium Azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Store vial at -20° C prior to opening. This product is stable at 4° C as an undiluted liquid. For extended storage, aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Dilute only prior to immediate use.
Expiry Date:	12 months

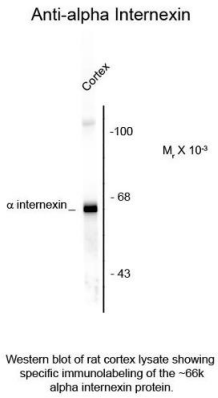
Images



Immunostaining of cultured neurons and glia with anti-chicken alpha-internexin (red) and anti-coronin 1a antibody (green).

Immunohistochemistry

Image 1. Immunohistochemistry of Anti-Alpha Internexin (chicken) Antibody - 200-901-D04 Immunohistochemistry of Anti-Alpha Internexin (chicken) Antibody. Tissue: cultured neurons and glia. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: Alpha Internexin antibody at 10 µg/mL for 1 h at RT. Secondary antibody: Peroxidase chicken secondary antibody at 1:10,000 for 45 min at RT. Localization: Alpha Internexin is neuronal. Staining: Alpha Internexin as precipitated red signal with anti-coronin 1a antibody (green).



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

Western Blotting

Image 2. Western Blot of Anti-Alpha Internexin (chicken) Antibody - 200-901-D04 Western Blot of Anti-Alpha Internexin (chicken) Antibody. Lane 1: rat cortex lysate. Lane 2: none. Load: 10 µg per lane. Primary antibody: Alpha Internexin antibody at 1:400 for overnight at 4°C. Secondary antibody: chicken secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: ~66kDa/~66kDa for alpha internexin protein. Other band(s): none.