

Datasheet for 200-901-D04**Alpha Internexin Antibody****Overview**

Description:	Anti-Alpha Internexin (Chicken) Antibody - 200-901-D04
Item No.:	200-901-D04
Size:	100 µL
Applications:	IHC, Multiplex, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Chicken

Product Details**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.

Synonyms:	internexin, NF-66, NEF5, Alpha-internexin, Alpha-Inx, Ina, Inexa
Host Species:	Chicken
Clonality:	Polyclonal
Format:	IgY

Target Details

Gene Name:	Ina
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Recombinant Protein
Immunogen:	Anti-Alpha Internexin Antibody was produced by repeated immunizations with recombinant rat alpha internexin expressed in E. coli.
Purity/Specificity:	Anti-Alpha Internexin Antibody is directed against rat Alpha Internexin proteins. The antibody was purified from chicken eggs as an IgY fraction. This antibody is directed against rat alpha internexin protein. Reactivity is expected from mouse and human. Cross reactivity with Alpha Internexin from other species has not been determined.
Relevant Links:	• UniProtKB - P23565 • GeneID - 24503 • UniProtKB - P23565.2

Application Details

Tested Applications:	IHC, Multiplex, WB
Application Note:	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.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:50,000
IF:	1:500
WB:	1:5000

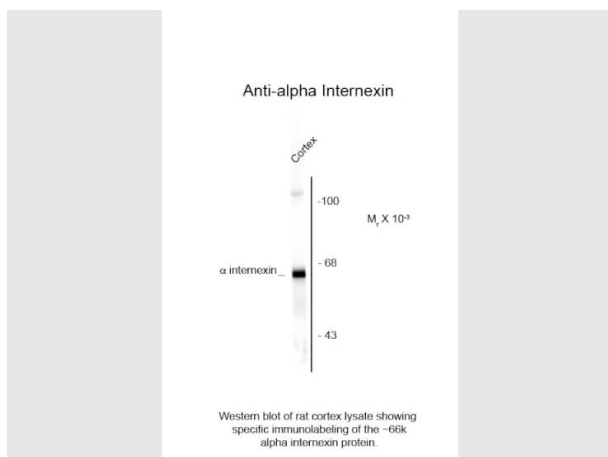
Formulation

Physical State:	Liquid
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide

Shipping & Handling

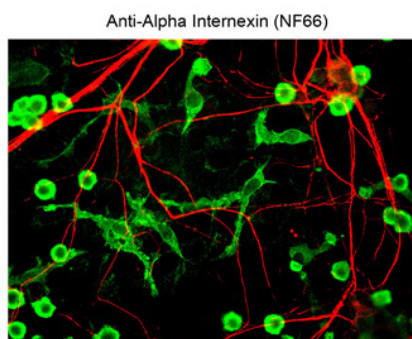
Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C prior to opening. This product is stable at 4° C as an undiluted liquid. For extended storage, aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Western Blot

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: IRDye800™ 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.



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

Immunohistochemistry

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).

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.