

**Datasheet for 200-901-X10****GAP43 Antibody****Overview**

|                      |                                                        |
|----------------------|--------------------------------------------------------|
| <b>Description:</b>  | Anti-GAP43 (CHICKEN) Polyclonal Antibody - 200-901-X10 |
| <b>Item No.:</b>     | 200-901-X10                                            |
| <b>Size:</b>         | 100 µL                                                 |
| <b>Applications:</b> | IHC, WB                                                |
| <b>Reactivity:</b>   | Human, Mouse, Rat                                      |
| <b>Host Species:</b> | Chicken                                                |

**Product Details**

|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Background:</b>   | GAP-43 is thought to have an important role in development and plasticity because it is expressed at high levels in neuronal growth cones during development and during axonal regeneration. There is also evidence from knockout animals that GAP-43 serves to amplify pathfinding signals from the growth cone. GAP-43 is thought to mediate at least some of these effects via interaction with actin. Importantly, phosphorylation at Ser41 by protein kinase C modulates the interaction of GAP-43 with actin and may also affect neurotransmitter release during forms of plasticity like LTP. GAP-43 Antibody is ideal for researchers interested in neuroscience research. |
| <b>Synonyms:</b>     | Neuromodulin, Axonal membrane protein GAP-43, Growth-associated protein 43, Protein F1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Host Species:</b> | Chicken                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Clonality:</b>    | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Format:</b>       | IgY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

**Target Details**

|                        |                                                                                                                                                                                                  |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene Name:</b>      | Gap43                                                                                                                                                                                            |
| <b>Reactivity:</b>     | Human, Mouse, Rat                                                                                                                                                                                |
| <b>Immunogen Type:</b> | Conjugated Peptide                                                                                                                                                                               |
| <b>Immunogen:</b>      | Anti-GAP-43 Antibody was produced in chickens by repeated immunizations with a synthetic peptide corresponding to amino acid residues from the C-terminal region of rat GAP43 conjugated to KLH. |

**Purity/Specificity:** Anti-GAP-43 Antibody is a purified total IgY fraction.

**Relevant Links:**

- [UniProtKB - P07936](#)
- [GeneID - 29423](#)
- [NCBI - NP\\_058891.1](#)

## Application Details

**Tested Applications:** IHC, WB

**Application Note:** Anti-GAP-43 Antibody is tested for Western Blot, immunohistochemistry, and immunocytochemistry, and it is specific for the ~43k GAP-43 protein. Specific conditions for reactivity should be optimized by the end user.

**Assay Dilutions:** All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.

**ELISA:** 1:20,000

**IHC:** 1:500-1:2000

**WB:** 1:2000

## Formulation

**Physical State:** Liquid (sterile filtered)

**Buffer:** 0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2

**Preservative:** 0.1% (w/v) Sodium Azide

**Stabilizer:** None

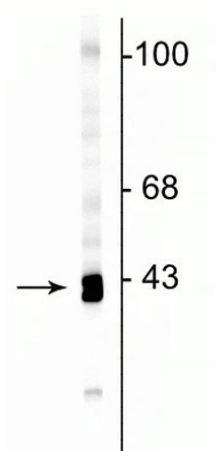
## Shipping & Handling

**Shipping Condition:** Wet Ice

**Storage Condition:** Store vial at -20° C prior to opening in undiluted aliquots. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature.

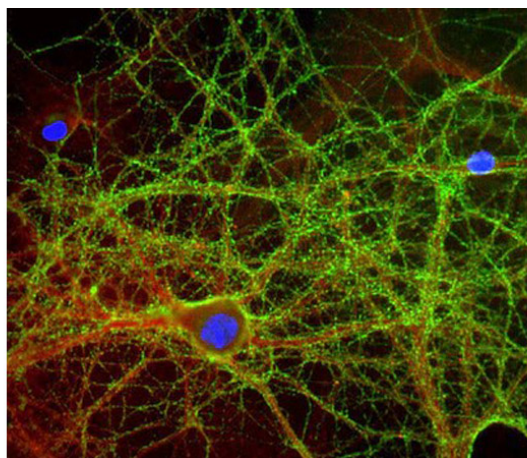
**Expiration:** Expiration date is one (1) year from date of receipt.

## Images



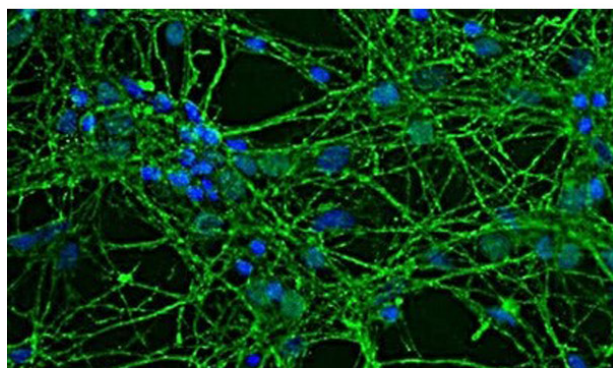
#### Western Blot

Western blot of Anti-GAP43 antibody.  
 Rat cortical lysate showing specific immunolabeling of the  
 ~43 kDa GAP43 protein.



#### Immunofluorescence Microscopy

Immunolabeling of mixed neuron and glial cultures with  
 anti-GAP43 (p/n 200-901-X10, 1:2000, green), alpha II  
 spectrin (1:1000, red) and nuclear staining with DAPI (blue).  
 The anti-GAP43 labels protein expressed in the axonal  
 membrane and synapses of neuronal cells. The Anti- $\alpha$ II-  
 Spectrin labels the submembraneous cytoskeleton of axons  
 and dendrites.



#### Immunofluorescence Microscopy

Immunofluorescence of rat neuron/glial culture labeling  
 GAP43 protein (p/n 200-901-X10, 1:2000, green) expressed  
 in the axonal membrane and synapses of neuronal cells.  
 DAPI (blue) was used for nuclear staining.

#### 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.