

Anti-GAP43 Antibody
Catalog # ABO10526**Specification****Anti-GAP43 Antibody - Product Information**

Application	WB, IHC
Primary Accession	P17677
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Neuromodulin(GAP43) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-GAP43 Antibody - Additional Information

Gene ID 2596

Other Names

Neuromodulin, Axonal membrane protein GAP-43, Growth-associated protein 43, Neural phosphoprotein B-50, pp46, GAP43

Calculated MW

24803 MW KDa

Application Details

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Rat, Mouse, By Heat
Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

Subcellular Localization

Cell membrane ; Peripheral membrane protein ; Cytoplasmic side . Cell projection, growth cone membrane ; Peripheral membrane protein ; Cytoplasmic side . Cell junction, synapse . Cell projection, filopodium membrane ; Peripheral membrane protein . Cytoplasmic surface of growth cone and synaptic plasma membranes.

Protein Name

Neuromodulin

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human GAP43(216-238aa KPKE SARQDEGKEEEPEADQEHA), different from the related mouse and rat sequences by one amino acid.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities

Belongs to the neuromodulin family.

Anti-GAP43 Antibody - Protein Information

Name GAP43

Function

This protein is associated with nerve growth. It is a major component of the motile 'growth cones' that form the tips of elongating axons. Plays a role in axonal and dendritic filopodia induction.

Cellular Location

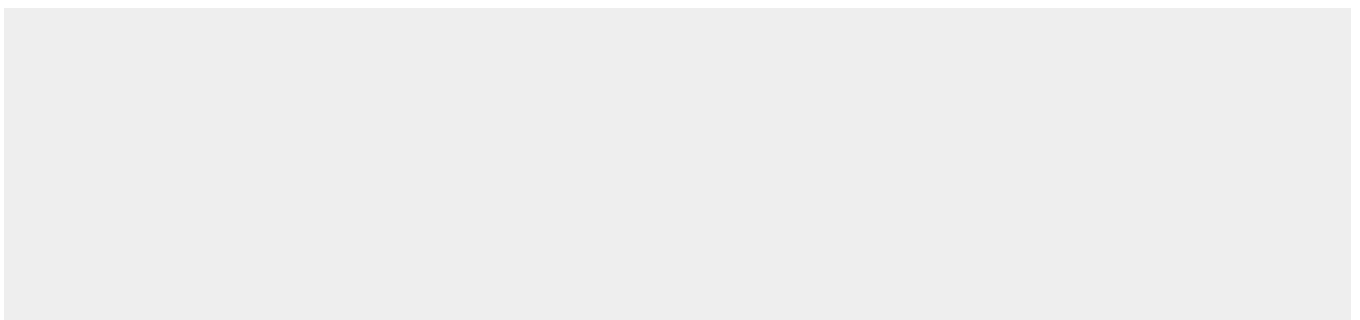
Cell membrane; Peripheral membrane protein; Cytoplasmic side. Cell projection, growth cone membrane; Peripheral membrane protein; Cytoplasmic side. Synapse Cell projection, filopodium membrane; Peripheral membrane protein. Perikaryon {ECO:0000250|UniProtKB:P07936}. Cell projection, dendrite {ECO:0000250|UniProtKB:P07936}. Cell projection, axon {ECO:0000250|UniProtKB:P07936}. Cytoplasm {ECO:0000250|UniProtKB:P07936}. Note=Cytoplasmic surface of growth cone and synaptic plasma membranes.

Anti-GAP43 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

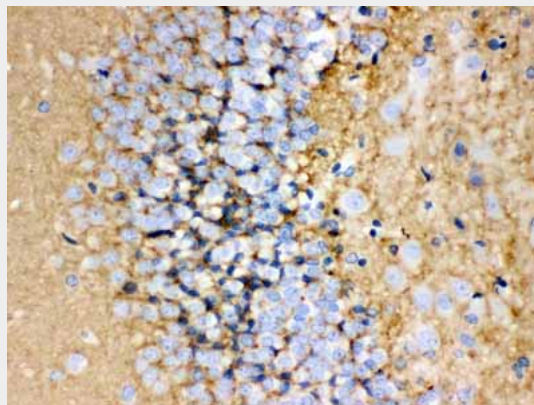
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-GAP43 Antibody - Images

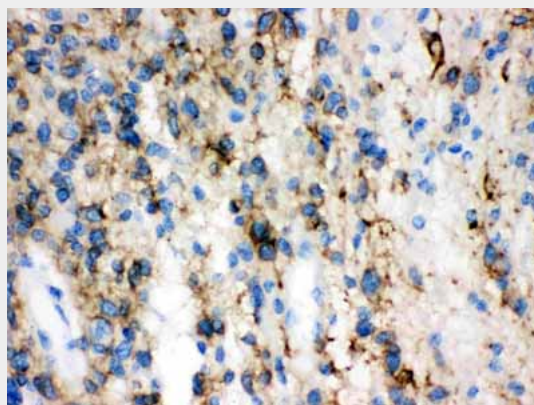




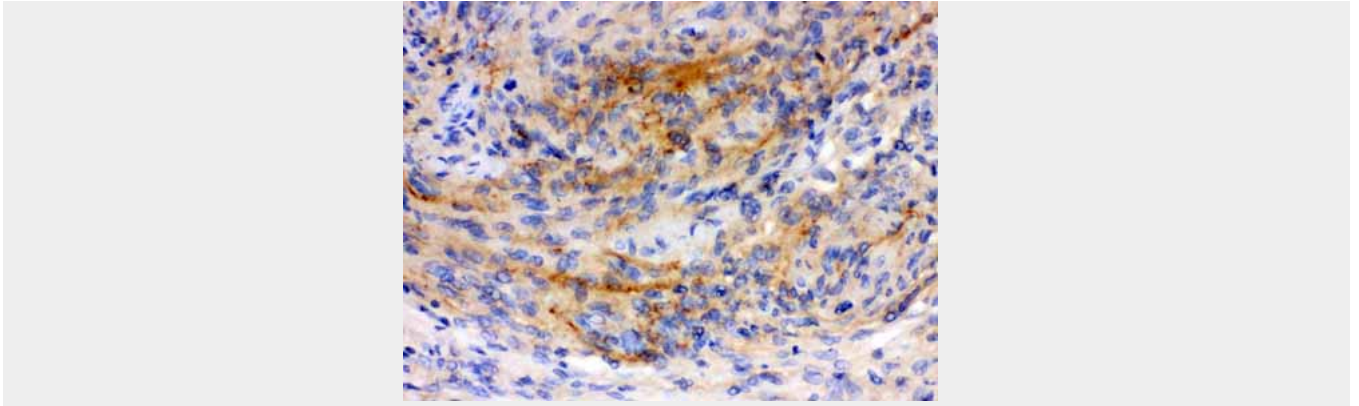
Anti-GAP43 antibody, ABO10526, Western blotting All lanes: Anti GAP43 (ABO10526) at 0.5ug/ml Lane 1: U87 Whole Cell Lysate at 40ug Lane 2: Rat Brain Tissue Lysate at 50ug Lane 3: Mouse Brain Tissue Lysate at 50ug Predicted bind size: 43KD Observed bind size: 43KD



Anti-GAP43 antibody, ABO10526, IHC(P) IHC(P): Rat Brain Tissue



Anti-GAP43 antibody, ABO10526, IHC(P) IHC(P): Human Glioma Tissue



Anti-GAP43 antibody, ABO10526, IHC(P)IHC(P): Human Meningeoma Tissue

Anti-GAP43 Antibody - Background

Growth Associated Protein-43(GAP-43), also known as nerve growth-related growth peptide GAP43, shares a high degree of homology between the sequence of the human gene and the rat gene. GAP-43 is considered a crucial component of an effective regenerative response in the nervous system. Somatic cell hybrids demonstrate localization of the GAP-43 gene to human chromosome 3 and to mouse chromosome 16. GAP-43 has been termed a growth" or "plasticity" protein because it is expressed at high levels in neuronal growth cones during development and during axonal regeneration. GAP-43 regulates growth of axons and modulates the formation of new connections."