10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-GAP43 Antibody
Catalog # ABO10526

Specification

Anti-GAP43 Antibody - Product Information

Application	**WB, IHC-P**
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 KPKESARQDEGKEEEPEADQEHA), 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.

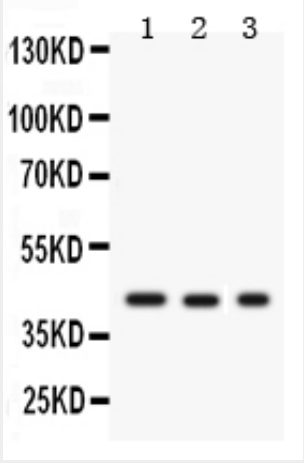
Anti-GAP43 Antibody - Protocols

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

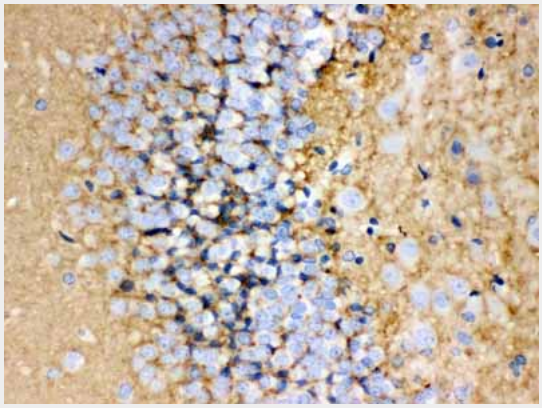
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-GAP43 Antibody - Images

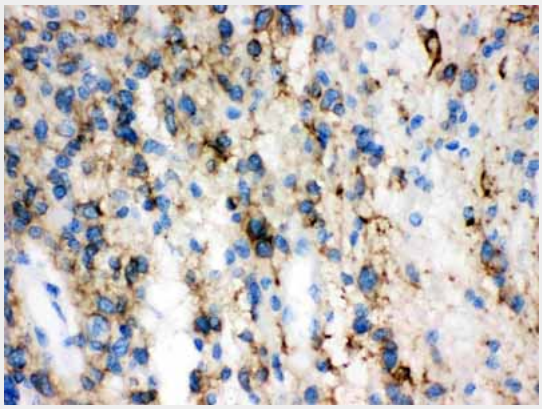
10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999



Anti-GAP43 antibody, ABO10526, Western blottingAll lanes: Anti GAP43 (ABO10526) at 0.5ug/mlLane 1: U87 Whole Cell Lysate at 40ugLane 2: Rat Brain Tissue Lysate at 50ugLane 3: Mouse Brain Tissue Lysate at 50ugPredicted bind size: 43KDObserved bind size: 43KD

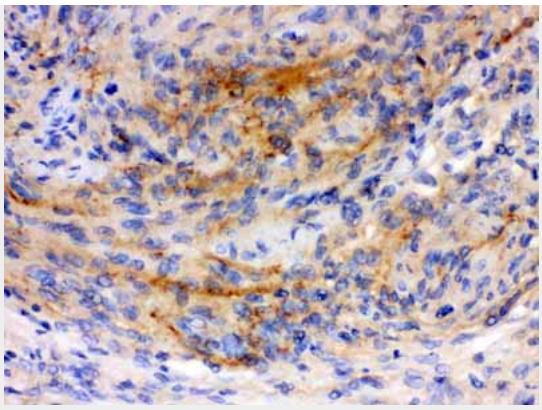


Anti-GAP43 antibody, ABO10526, IHC(P)IHC(P): Rat Brain Tissue



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

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999



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."