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Anti-GAP43 Antibody (Monoclonal, GAP-7B10)

Catalog # ABO10433

Specification

Anti-GAP43 Antibody (Monoclonal, GAP-7B10) - Product Information

Application	**WB, IHC-P, IHC-F**
Primary Accession	P07936
Host	**Mouse**
Isotype	**Mouse IgG2a**
Reactivity	**Human, Mouse, Rat**
Clonality	**Monoclonal**
Format	**Lyophilized**

Description
Mouse IgG monoclonal antibody for GAP43, growth associated protein 43 (GAP43) detection. Tested with WB, IHC-P, IHC-F in Human; mouse; rat. No cross reactivity with otherproteins.

Reconstitution
Add 1ml of PBS buffer will yield a concentration of 100ug/ml.

Anti-GAP43 Antibody (Monoclonal, GAP-7B10) - Additional Information

Gene ID 29423

Other Names
Neuromodulin, Axonal membrane protein GAP-43, Growth-associated protein 43, Protein F1, Gap43

Calculated MW
23603 MW KDa

Application Details
Immunohistochemistry(Paraffin-embedded Section), 1-2 µg/ml, Human, mouse, rat, By Heat

Immunohistochemistry(Frozen Section), 1-2 µg/ml, Human, mouse, rat, -
Western blot, 0.5-1 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
Mouse ascites fluid, 1.2% sodium acetate, 2mg BSA, with 0.01mg NaN3 as preservative.

Immunogen
GAP-43 from neonatal rat forebrain membranes.

Purification
Ascites

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 (Monoclonal, GAP-7B10) - 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 (By similarity).

Cellular Location
Cell membrane {ECO:0000250|UniProtKB:P17677}; Peripheral membrane protein {ECO:0000250|UniProtKB:P17677}; Cytoplasmic side {ECO:0000250|UniProtKB:P17677}. Cell projection, growth cone. Cell projection, growth cone membrane {ECO:0000250|UniProtKB:P17677}; Peripheral membrane protein {ECO:0000250|UniProtKB:P17677}; Cytoplasmic side {ECO:0000250|UniProtKB:P17677}. Synapse {ECO:0000250|UniProtKB:P17677} Cell projection, filopodium membrane {ECO:0000250|UniProtKB:P17677}; Peripheral membrane protein {ECO:0000250|UniProtKB:P17677}. Perikaryon. Cell projection, dendrite. Cell projection, axon. Cytoplasm Note=Cytoplasmic surface of growth cone and synaptic plasma membranes {ECO:0000250|UniProtKB:P17677}

Tissue Location
Expressed in hippocampal neurons, with highest levels of expression in the CA4 and CA3 neurons and lower levels in CA1 neurons (PubMed:11948657, PubMed:17577668). Expressed in the dorsal root ganglion (PubMed:12957493).

Anti-GAP43 Antibody (Monoclonal, GAP-7B10) - 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 (Monoclonal, GAP-7B10) - Images

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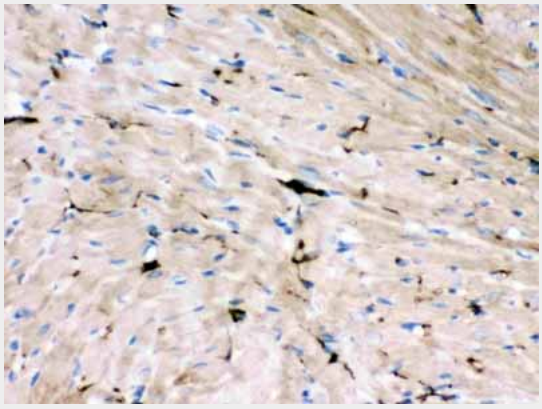

Anti- GAP43 antibody, ABO10433, IHC(P)IHC(P): Rat Cardiac Muscle Tissue

Anti-GAP43 Antibody (Monoclonal, GAP-7B10) - Background

GAP43 is expressed by developing and regenerating neurons, and to a lesser extent, reactive glial cells. It is used widely to specifically label injured neurons and to score neuronal regeneration. GAP43 is also a neuronal growth cone protein thought to be involved in pathfinding. GAP43 is considered to be a crucial component of an effective regenerative response in the nervous system.