

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

Catalog # ABO10433

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

Additional Information

Gene ID	29423
Other Names	Neuromodulin, Axonal membrane protein GAP-43, Growth-associated protein 43, Protein F1, Gap43
Calculated MW	23603
Application Details	Immunohistochemistry(Paraffin-embedded Section), 1-2 μ g/ml, Human, mouse, rat, By Heat Immunohistochemistry(Frozen Section), 1-2 μ g/ml, Human, mouse, rat, - Western blot, 0.5-1 μ g/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.
Source	Eukaryota
Protein Name	Neuromodulin
Contents	Mouse ascites fluid, 1.2% sodium acetate, 2mg BSA, with 0.01mg NaN ₃ as preservative.
Clone Names	GAP-7B10
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 reconstitution, 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.

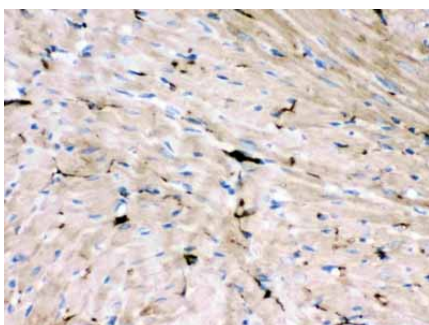
Protein Information

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).

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.

Images



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

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