

GAP43 Antibody | anti-GAP43 antibody

GAP43, Monoclonal Antibody, Mouse

CATALOG # AAA76426	REACTIVITY Human, Mouse, Rat	APPLICATIONS Western Blot, Immunofluorescence, Immunocytochemistry
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PRODUCT SYNONYMS

GAP43; Monoclonal Antibody; Mouse; anti-GAP43 antibody

PRODUCT SPECIFICATIONS

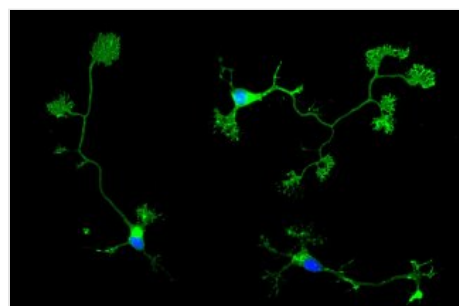
Reactivity	Human, Mouse, Rat
Form/Format	Supernatant - Liquid
Sequence Length	242
Applicable Applications for anti-GAP43 antibody	WB (Western Blot), IF (Immunofluorescence), ICC (Immunocytochemistry)
Type Info	Mouse IgG
Immunogen	C-terminal peptide of rat and mouse GAP43, which is KEDPEADQEHA, to which an N-terminal Cysteine residue was added to allow chemical coupling to Keyhole Limpet Hemocyanin carrier protein.

IMAGES



Application Data

Image: Western blot of whole rat spinal cord lysates probed with mouse monoclonal antibody to GAP43 in lane 16 and another similar antibody in lane 17. Dots in middle of strips indicate position of 50kDa and 37kDa protein bands. Note that the strong single band running at about 43kDa corresponds to GAP43.



Application Data

Image: E18 hippocampal neurons grown for four days and stained in the green channel with monoclonal antibody to Growth Associated Protein 43 (GAP43) an abundant protein of neuronal membranes especially concentrated in axonal membranes and growth cones. GAP43 is heavily palmitoylated in the Golgi, so this antibody can be used to localize the neuronal Golgi complex. Blue stain is DAPI and reveals cell nuclei of these neuronal cells. Protocol on data-sheet.

ADDITIONAL INFORMATION

Related Product Information for anti-GAP43 antibody

GAP-43 (growth associated protein 43 kDa; also known as neuromodulin) is a 24 kDa, neuron growth cone-associated member of the neuromodulin family. Apparently due to its tertiary structure, it runs anomalously at 43 kDa on SDS-polyacrylamide gel. Rat GAP-43 is a 226 amino acid (aa) protein that contains an N-terminal lipid binding motif, an 11 aa IQ domain (IQ:Ile-Gln-X-Ser-etc) (aa 38 - 48), and a C-terminus with four potential serine phosphorylation sites. The molecule may utilize the IQ domain to bind calmodulin. Protein kinase C-mediated phosphorylation of the Serine at 41 within this site inhibits this interaction. Unphosphorylated, calmodulin-bound GAP-43 is always associated with neurite retraction, while S41 phosphorylated GAP-43 stabilizes actin filaments and promotes growth cone extension.

Product Categories/Family for anti-GAP43 antibody

Antibodies; Axon Growth and Guidance; GAP43

NCBI AND UNIPROT INFORMATION

NCBI GI #	37781182
Molecular Weight	25,066 Da
NCBI Official Full Name	GAP43
UniProt Protein Name	Neuromodulin
UniProt Gene Name	GAP43
UniProt Entry Name	NEUM_BOVIN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://stage.aaabiotech.com/human-mouse-rat-antibody/gap43/76426>