

Anti-GAP43 Antibody

Our Anti-GAP43 primary antibody from PhosphoSolutions is chicken polyclonal. It detects bovine, hors
Catalog # AN1410

Product Information

Application	WB, IHC, ICC
Primary Accession	P07936
Host	Chicken
Clonality	Polyclonal
Isotype	IgY
Calculated MW	23603

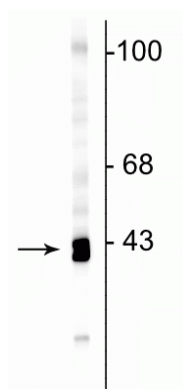
Additional Information

Gene ID	29423
Other Names	Axonal membrane protein GAP 43 antibody, Axonal membrane protein GAP-43 antibody, B 50 antibody, Calmodulin binding protein P 57 antibody, F1 antibody, GAP 43 antibody, GAP-43 antibody, GAP43 antibody, Growth Associated Protein 43 antibody, Growth-associated protein 43 antibody, Nerve Growth Related Peptide antibody, Nerve growth related peptide GAP43 antibody, NEUM_HUMAN antibody, Neural phosphoprotein B 50 antibody, Neural phosphoprotein B-50 antibody, Neuromodulin antibody, Neuron growth associated protein 43 antibody, PP46 antibody, Protein F1 antibody, QtrA-11580 antibody, QtrA-13071 antibody
Target/Specificity	GAP-43 is thought to have an important role in development and plasticity because it is expressed at high levels in neuronal growth cones during development and during axonal regeneration (Benowitz and Routtenberg, 1997). There is also evidence from knockout animals that GAP-43 serves to amplify pathfinding signals from the growth cone (Strittmatter et al., 1995). GAP-43 is thought to mediate at least some of these effects via interaction with actin. Importantly, phosphorylation at Ser-41 by protein kinase C modulates the interaction of GAP-43 with actin (He et al., 1997) and may also affect neurotransmitter release during forms of plasticity like LTP (Hulo et al., 2002).
Dilution	WB~~1:1000 IHC~~1:100~500 ICC~~N/A
Format	Total IgY fraction
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Anti-GAP43 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.
Shipping	Blue Ice

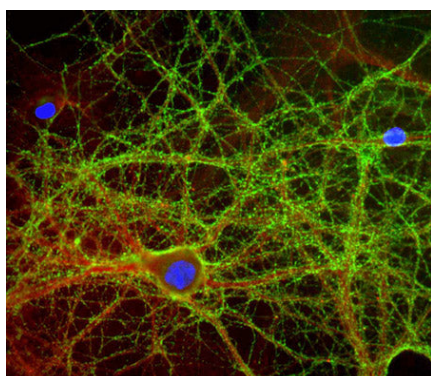
Background

GAP-43 is thought to have an important role in development and plasticity because it is expressed at high levels in neuronal growth cones during development and during axonal regeneration (Benowitz and Routtenberg, 1997). There is also evidence from knockout animals that GAP-43 serves to amplify pathfinding signals from the growth cone (Strittmatter et al., 1995). GAP-43 is thought to mediate at least some of these effects via interaction with actin. Importantly, phosphorylation at Ser-41 by protein kinase C modulates the interaction of GAP-43 with actin (He et al., 1997) and may also affect neurotransmitter release during forms of plasticity like LTP (Hulo et al., 2002).

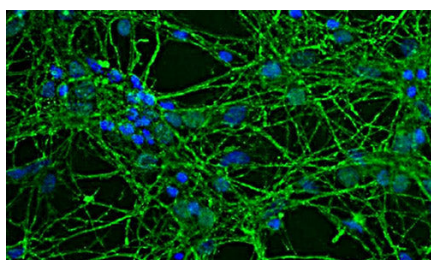
Images



Western blot of rat cortical lysate showing specific immunolabeling of the ~43 kDa GAP43 protein.



Immunolabeling of mixed neuron and glial cultures with anti-GAP43 (cat. AN1410, 1:2000, green), alpha II spectrin (cat. 99-A2SR, 1:1000, red) and nuclear staining with DAPI (blue). The anti-GAP43 labels protein expressed in the axonal membrane and synapses of neuronal cells. The Anti- α II-Spectrin labels the submembraneous cytoskeleton of axons and dendrites.



Immunofluorescence of rat neuron/glial culture labeling GAP43 protein (cat. AN1410, 1:2000, green) expressed in the axonal membrane and synapses of neuronal cells. DAPI (blue) was used for nuclear staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.