

GAP43 Rabbit mAb

Catalog No: #49013



Package Size: #49013-1 50ul #49013-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

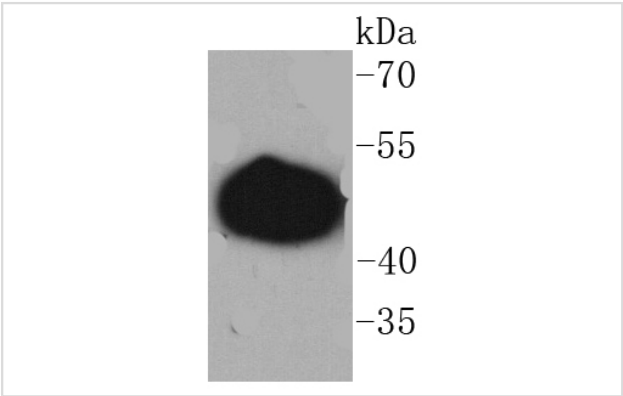
Description

Product Name	GAP43 Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal antibody
Clone No.	SC60-06
Purification	ProA affinity purified
Applications	WB, ICC/IF, IHC, IP, FC
Species Reactivity	Human;Mouse;Rat
Immunogen Description	recombinant protein
Conjugates	Unconjugated
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 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
Accession No.	Swiss-Prot#:P17677
Calculated MW	48 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

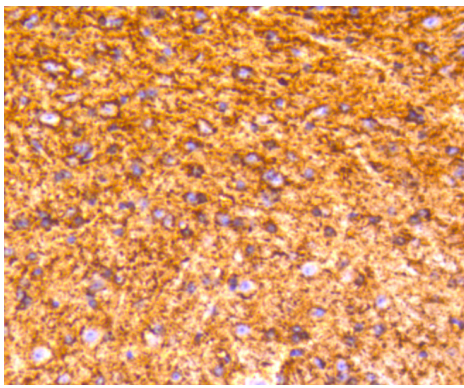
Application Details

WB: 1:2,000-1:5,000IHC: 1:100-1:500 ICC: 1:100-1:500FC: 1:50-1:100

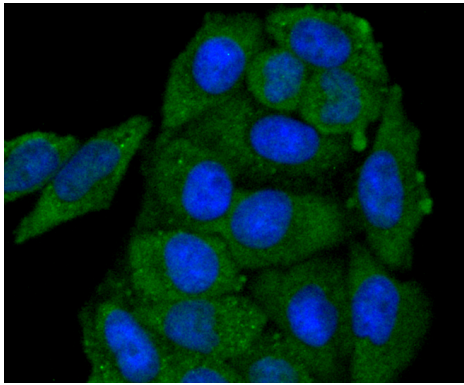
Images



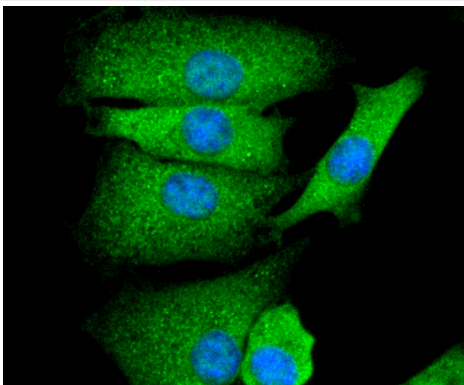
Western blot analysis of GAP43 on mouse brain lysates using anti-GAP43 antibody at 1/1,000 dilution.



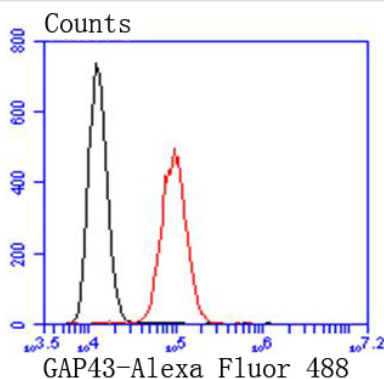
Immunohistochemical analysis of paraffin-embedded mouse brain tissue using anti-GAP43 antibody. Counter stained with hematoxylin.



ICC staining GAP43 in HeLa cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining GAP43 in SHG-44 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



Flow cytometric analysis of SH-SY-5y cells with GAP43 antibody at 1/50 dilution (red) compared with an unlabelled control (cells without incubation with primary antibody; black). Alexa Fluor 488-conjugated goat anti rabbit IgG was used as the secondary antibody.

Background

GAP-43 (growth associated protein 43, B-50, PP46, calmodulin-binding protein P-57, neuromodulin, neuron growth-associated protein 43, protein F1) is a crucial component for regenerative response in the nervous system. It is present at high levels in neuronal growth cones during development and axonal regeneration. GAP-43 is normally produced by neurons during developmental growth and axonal regeneration, but it is also expressed in specific regions of the normal adult nervous system. The neuron-specific Elav/Hu family member, HuD, interacts with and stabilizes GAP-43 mRNA in developing neurons and leads to increased levels of GAP-43 protein. Heterozygous GAP-43 knockout mice with GAP-43 levels reduced by one-half display significant memory impairments in cued conditioning or on tests of nociceptive or auditory perception.

References

1. D'Agostino G et al. Prolyl endopeptidase-deficient mice have reduced synaptic spine density in the CA1 region of the hippocampus, impaired LTP, and spatial learning and memory. *Cereb Cortex* 23:2007-14 (2013).
2. Figueroa JD et al. Metabolomics uncovers dietary omega-3 fatty acid-derived metabolites implicated in anti-nociceptive responses after experimental spinal cord injury. *Neuroscience* 255C:1-18 (2013).

Published Papers

el at., Maf1 is an intrinsic suppressor against spontaneous neural repair and functional recovery after ischemic stroke. In *J Adv Res* on 2022 Nov 17 by Chi Kwan Tsang, Qiongjie Mi, et al.. PMID:36402285, , (2022)

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Note: This product is for in vitro research use only and is not intended for use in humans or animals.