

ARG10716 anti-GAP43 antibody [5E8]

Package: 50 µl
Store at: -20°C

Summary

| | |
|---------------------|--|
| Product Description | Mouse Monoclonal antibody [5E8] recognizes GAP43 |
| Tested Reactivity | Hu, Ms, Rat |
| Tested Application | ICC/IF, IHC-Fr, WB |
| Host | Mouse |
| Clonality | Monoclonal |
| Clone | 5E8 |
| Isotype | IgG1 |
| Target Name | GAP43 |
| Species | Human |
| Immunogen | Recombinant full-length Human GAP43. |
| Conjugation | Un-conjugated |
| Alternate Names | pp46; Growth-associated protein 43; B-50; Neuromodulin; PP46; Axonal membrane protein GAP-43; Neural phosphoprotein B-50 |

Application Instructions

| Application table | Application | Dilution |
|-------------------|--|-----------------|
| | ICC/IF | 1:1000 - 1:5000 |
| | IHC-Fr | 1:1000 - 1:5000 |
| | WB | 1:1000 - 1:5000 |
| Application Note | * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist. | |

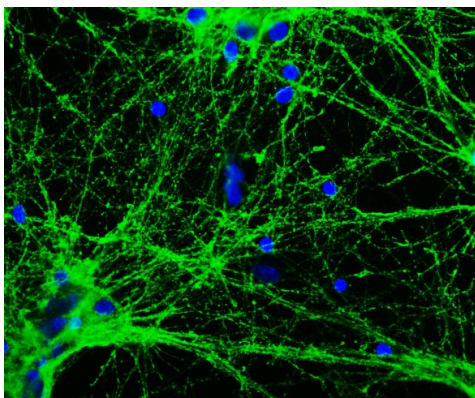
Properties

| | |
|---------------------|---|
| Form | Liquid |
| Purification | Affinity purification. |
| Buffer | PBS and 50% Glycerol. |
| Stabilizer | 50% Glycerol |
| Concentration | 1 mg/ml |
| Storage instruction | For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use. |
| Note | For laboratory research only, not for drug, diagnostic or other use. |

Bioinformation

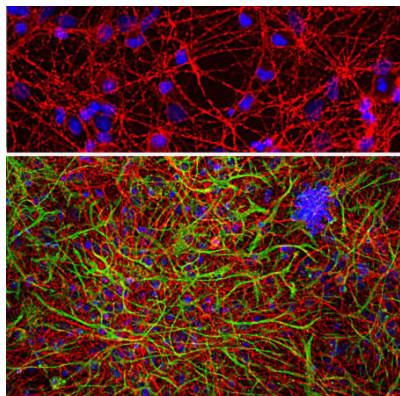
| | |
|----------------|--|
| Gene Symbol | GAP43 |
| Gene Full Name | growth associated protein 43 |
| Background | The protein encoded by this gene has been termed a 'growth' or 'plasticity' protein because it is expressed at high levels in neuronal growth cones during development and axonal regeneration. This protein is considered a crucial component of an effective regenerative response in the nervous system. Alternatively spliced transcript variants encoding distinct isoforms have been found for this gene. [provided by RefSeq, Jul 2008] |
| 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. [UniProt] |
| Calculated Mw | 25 kDa |
| PTM | Phosphorylated at Ser-41 by PHK. Phosphorylation of this protein by a protein kinase C is specifically correlated with certain forms of synaptic plasticity. Palmitoylation by ARF6 is essential for plasma membrane association and axonal and dendritic filopodia induction. Deacylated by LYPLA2. |

Images



ARG10716 anti-GAP43 antibody [5E8] ICC/IF image

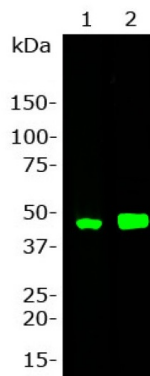
Immunocytochemistry: Mixed Rat neuronal cultures stained with ARG10716 anti-GAP43 antibody [5E8] (green). The GAP43 antibody stains the plasma membrane of neurons and is particularly concentrated in dendrites.



ARG10716 anti-GAP43 antibody [5E8] ICC/IF image

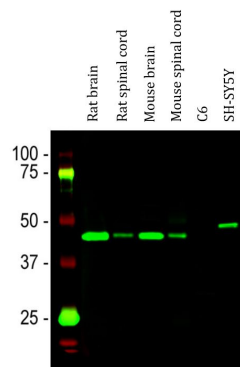
Immunofluorescence: Cortical neuron-glia cells from E20 Rat stained with ARG10716 anti-GAP43 antibody [5E8] (red) at 1:1000 dilution and costained with [ARG52313](#) anti-GFAP antibody (green) at 1:2000 dilution. DAPI (blue) for nuclear staining.

The GAP43 antibody labels protein expressed in the axonal membrane of neuronal cells, while the GFAP antibody stains astroglial cells.



ARG10716 anti-GAP43 antibody [5E8] WB image

Western blot: 1) SH-SY5Y cell lysate, and 2) whole Rat brain lysate was stained with ARG10716 anti-GAP43 antibody [5E8] at 1: 2000 dilution.



ARG10716 anti-GAP43 antibody [5E8] WB image

Western blot: Rat brain, Rat spinal cord, Mouse brain, Mouse spinal cord, C6 and SH-SY5Y cell lysates stained with ARG10716 anti-GAP43 antibody [5E8] (green) at 1:2000 dilution.

The protein is expressed in rodent and Human neurons and neuronal derived cells but not in C6 cells which are of glial origin.