ARG10714
anti-GAP43 antibody [1E3]

Package: 50 µl
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [1E3] recognizes GAP43
Tested Reactivity	Hu, Ms, Rat, Cow, Hrs, Pig
Predict Reactivity	Chk
Tested Application	ICC/IF, IHC-Fr, WB
Host	Mouse
Clonality	Monoclonal
Clone	1E3
Isotype	IgG1
Target Name	GAP43
Species	Mouse
Immunogen	C-terminal peptide of Mouse and Rat GAP43, which is KEDPEADQEHA, with an N-terminal Cys added to allow chemical coupling to KLH carrier protein.
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
IHC-Fr	1:1000
WB	1:10000

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

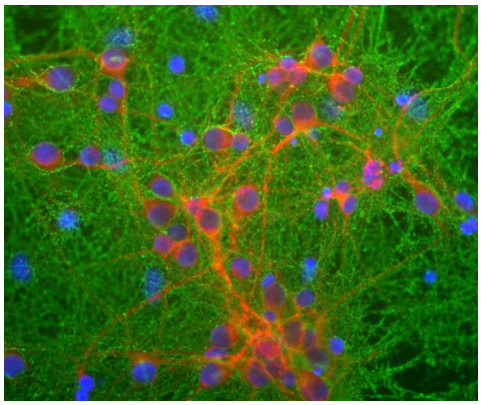
Form	Liquid
Purification	Affinity purification.
Buffer	PBS and 50% Glycerol.
Stabilizer	50% Glycerol
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not 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

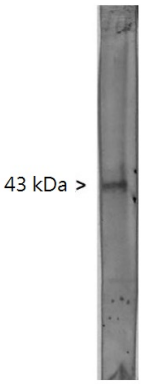
Gene Symbol	Gap43
Gene Full Name	growth associated protein 43
Background	The protein encoded by this gene has been termed a 'growth' or 'plasticity' protein because it is expressed at high levels in neuronal growth cones during development and axonal regeneration. This protein is considered a crucial 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



ARG10714 anti-GAP43 antibody [1E3] ICC/IF image

Immunocytochemistry: Mixed neuronal cultures stained with ARG10714 anti-GAP43 antibody [1E3] (green) and co-stained with rabbit antibody to MAP2 (red); DNA (blue). The GAP43 antibody stains the plasma membrane of neurons and is particularly concentrated in dendrites.



ARG10714 anti-GAP43 antibody [1E3] WB image

Western blot: Whole Rat spinal cord lysates stained with ARG10714 anti-GAP43 antibody [1E3]. Dots in middle of strips indicate position of 50 kDa and 37 kDa protein bands.