

ARG52394 anti-Peripherin antibody [7C5]

Package: 50 µl
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [7C5] recognizes Peripherin
Tested Reactivity	Ms, Rat
Tested Application	ICC/IF, WB
Host	Mouse
Clonality	Monoclonal
Clone	7C5
Isotype	IgG1
Target Name	Peripherin
Species	Rat
Immunogen	Recombinant rat peripherin expressed in and purified from E. coli
Conjugation	Un-conjugated
Alternate Names	Peripherin; NEF4; PRPH1; Neurofilament 4

Application Instructions

Application table	Application	Dilution
	ICC/IF	1:100 - 1:500
	WB	1:1000
Application Note	<p>Specific for the ~57kDa peripherin protein. This antibody performs well on aldehyde fixed tissues.</p> <p>* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.</p>	

Properties

Form	Liquid
Purification	Total IgG fraction
Buffer	Total IgG fraction and 10 mM Sodium azide
Preservative	10 mM Sodium azide
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 or below. 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.

Database links

[GeneID: 24688 Rat](#)

Background

Peripherin is a ~57kDa intermediate filament subunit found initially in sensory neurons of the peripheral nervous systems, which gives the protein its name. Subsequently, peripherin was found in some sensory and other neurons of the central nervous system and also in PC12 cells. Peripherin is also expressed in certain neuroendocrine tumors and in the insulin producing cells of the pancreas. Peripherin belongs to the Class III family of intermediate filament subunits which also includes vimentin, glial fibrillary acidic protein (GFAP) and desmin. In contrast to the neurofilaments, peripherin is strongly up-regulated after nerve injury. Antibodies to peripherin can be used in identifying, classifying, and studying neurons throughout the nervous system. Peripherin is also a good diagnostic marker for ballooned axons seen in Lou Gehrig's disease (Amyotrophic lateral sclerosis) and some neuronally derived tumors. Autoantibodies to peripherin are frequently seen in the sera of patients with diabetes. Peripherin is not related to peripherin/RDS, a protein of the photoreceptor outer membrane mutations of which are causative of certain forms of slow retinal degeneration.

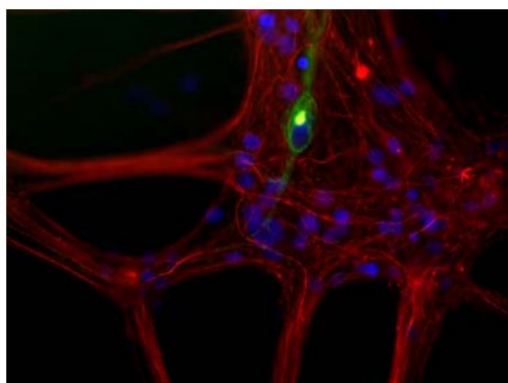
Research Area

Neuroscience antibody; Signaling Transduction antibody

Calculated Mw

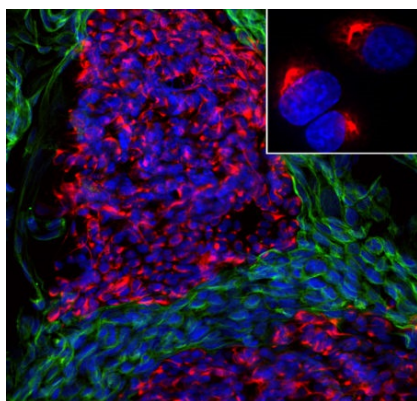
54 kDa

Images



ARG52394 anti-Peripherin antibody [7C5] ICC/IF image

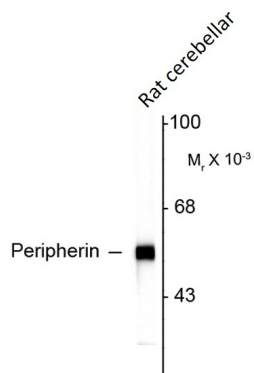
Immunofluorescence: Cultured newborn rat neurons and glia stained with ARG52394 anti-Peripherin antibody [7C5] showing peripherin in green and neurofilament L in red.



ARG52394 anti-Peripherin antibody [7C5] ICC/IF image

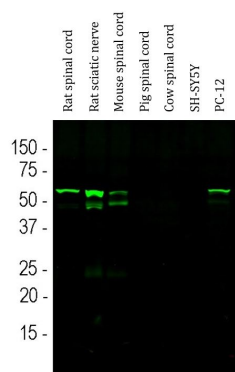
Immunofluorescence: Mixed fibroblast and Rat pheochromocytoma PC-12 cell culture stained with ARG52394 anti-Peripherin antibody [7C5] (red) at 1:500 dilution, and costained with [ARG52468](#) anti-Vimentin antibody (green) at 1:10000 dilution. Hoechst (blue) for nuclear staining.

Clone 7C5 reveals cytoplasmic filamentous staining in the small PC-12 cells, while Vimentin antibody stains intermediate filaments in the surrounding fibroblastic cells which do not express Peripherin.



ARG52394 anti-Peripherin antibody [7C5] WB image

Western blot: Rat cerebellar lysate showing specific immunolabeling of the ~ 57 kDa peripherin protein stained with ARG52394 anti-Peripherin antibody [7C5].



ARG52394 anti-Peripherin antibody [7C5] WB image

Western blot: Rat spinal cord, Rat sciatic nerve, Mouse spinal cord, Pig spinal cord, Cow spinal cord, SH-SY5Y and PC-12 cell lysates stained with ARG52394 anti-Peripherin antibody [7C5] (green) at 1:1000 dilution.

The band at ~ 57 kDa corresponds to the Peripherin protein detected only in Rat and Mouse lysates, since the antibody is rodent specific.