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Peripherin Antibody
Mouse monoclonal antibody
Catalog # AN1154

Specification

Peripherin Antibody - Product Information

Application	**WB, IF**
Primary Accession	P21807
Reactivity	**Human, Mouse, Rat**
Host	**Mouse**
Clonality	**monoclonal**
Isotype	**IgG1**
Calculated MW	**57 KDa**

Peripherin Antibody - Additional Information

Gene ID	**3414**
Gene Name	**PRPH**

Other Names
Peripherin, Prph, Prph1

Target/Specificity
Recombinant rat peripherin expressed in and purified from E. coli.

Dilution
WB~~ 1:1000
IF~~ 1:200

Format
Unpurified, concentrated culture supernatant.

Antibody Specificity
Specific for the ~57kDa peripherin protein. This antibody performs well on aldehyde fixed tissues.

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
Peripherin Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

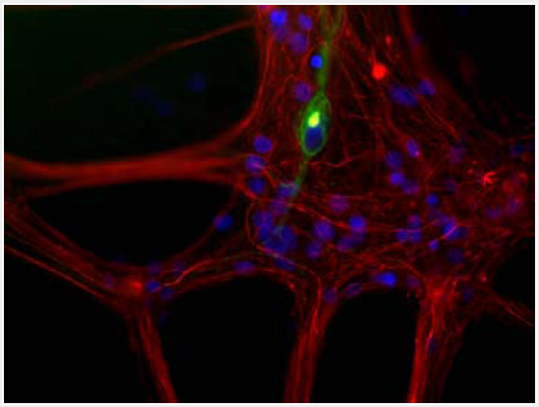
Shipping
Blue Ice

Peripherin Antibody - Protocols

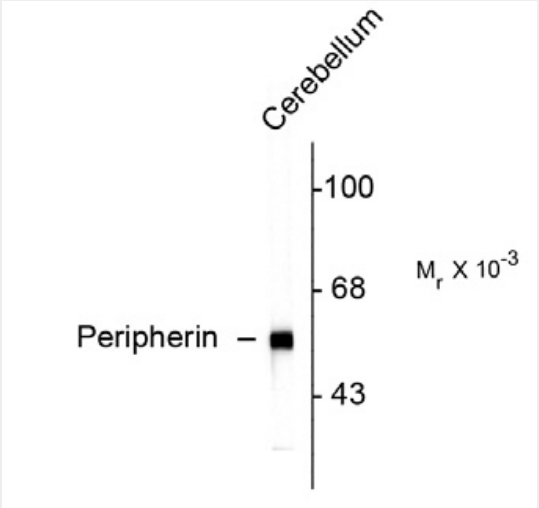
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Peripherin Antibody - Images



Western blot of rat cerebellar lysate showing specific immunolabeling of the ~ 57k peripherin protein.



Immunostaining of cultured newborn rat neurons and glia showing peripherin in green and neurofilament L in red.

Peripherin Antibody - 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 (1). 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 (2). Autoantibodies to peripherin are frequently seen in the sera of patients with diabetes (3). 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.

Peripherin Antibody - References

1. Terao E, Janssens S, van den Bosch de Aquilar P, Portier M, Klosen P (2000) In vivo expression of the intermediate filament peripherin in rat motorneurons: modulation by inhibitory and stimulatory signals. Neuroscience 101(3):679-88.
2.
Roberson J, Doroudchi MM, Nguyen MD, Durham, HD, Shaw G, Julien JP, Mushynski WE. (2003) A neurotoxic peripherin splice variant in a mouse model of ALS. J. Cell Biol. 160(6):939-49.
3.
Boitard C, Villa MC, Becourt C, Gia HP, Huc C, Sempe P, Portier MM, Bach JF (1992) Peripherin: an islet antigen that is cross-reactive with nonobese diabetic mouse class II gene products. Proc Natl Acad Sci USA 89(1):172-6.