

## **Anti-Peripherin Antibody**

Our Anti-Peripherin primary antibody from PhosphoSolutions is mouse monoclonal. It detects mouse and Catalog # AN1516

## **Specification**

## **Anti-Peripherin Antibody - Product Information**

Application WB, IHC
Primary Accession P21807
Host Mouse
Clonality Monoclonal
Isotype IgG1
Calculated MW 53550

## **Anti-Peripherin Antibody - Additional Information**

#### **Other Names**

NEF 4 antibody, NEF4 antibody, Neurofilament 4 (57kD) antibody, Neurofilament 4 antibody, Perf antibody, PERI\_HUMAN antibody, Peripherin antibody, PRPH 1 antibody, prph antibody, PRPH1 antibody

## Target/Specificity

Peripherin is a ~57 kDa 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.

## **Dilution**

WB~~1:1000 IHC~~1:100~500

#### **Format**

Concentrated tissue culture supernatant

#### 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**

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



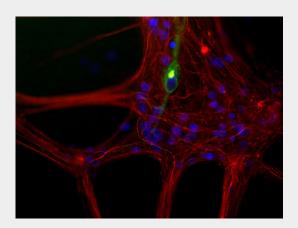
**Shipping** Blue Ice

# **Anti-Peripherin Antibody - Protocols**

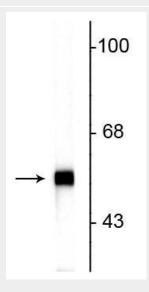
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# **Anti-Peripherin Antibody - Images**

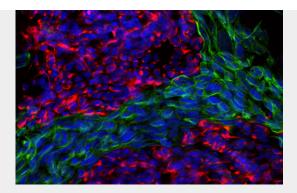


Immunostaining of cultured newborn rat neurons and glia showing peripherin (cat. 1630-PER, green, 1:200) and neurofilament L (red). The nuclear DNA is stained blue.



Western blot of rat cerebellar lysate showing specific immunolabeling of the  $\sim$ 57 kDa peripherin protein.





Immunoflourescence of mixed fibroblasts and PC12 cells labeled with anti-peripherin (cat. 1630-PER, red, 1:500) and anti-vimentin (cat. 2105-VIM, green, 1:10,000). The blue is Hoechst staining nuclear DNA. Peripherin is labeled in only the PC12 cells cytoplasmic filaments and vimentin is only labeled in the fibroblasts intermediate filaments where peripherin is not present.

# Anti-Peripherin Antibody - Background

Peripherin is a ~57 kDa 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.