

# Peripherin (6H10): sc-71880

## BACKGROUND

Peripherin is a type III intermediate filament protein (IFP) that is expressed in peripheral and some central nervous system (CNS) neurons. Peripherin activation is known to be induced by leukemia inhibitory factor (LIF). LIF activates Peripherin by inducing members of STAT transcription factor family to bind to a specific promoter element in the Peripherin gene. IL-6 is also known to induce Peripherin expression. Although it is not essential for neurite formation, Peripherin is necessary for cellular intermediate filament network formation. Peripherin, unlike most intermediate filament proteins, has been reported to be modified by tyrosine phosphorylation.

## REFERENCES

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3. Sterneck, E., Kaplan, D.R. and Johnson, P.F. 1996. Interleukin-6 induces expression of Peripherin and cooperates with Trk receptor signaling to promote neuronal differentiation in PC-12 cells. *J. Neurochem.* 67: 1365-1374.
4. Leconte, L., Santha, M., Fort, C., Poujeol, C., Portier, M.M. and Simonneau, M. 1996. Cell type-specific expression of the mouse Peripherin gene requires both upstream and intragenic sequences in transgenic mouse embryos. *Brain Res. Dev. Brain Res.* 92: 1-9.
5. Angelastro, J.M., Ho, C.L., Frappier, T., Liem R.K. and Greene, L.A. 1998. Peripherin is tyrosine-phosphorylated at its carboxyl-terminal tyrosine. *J. Neurochem.* 70: 540-549.
6. Lecomte, M.J., Basseville, M., Landon, F., Karpov, V. and Fauquet, M. 1998. Transcriptional activation of the mouse Peripherin gene by leukemia inhibitory factor: involvement of STAT proteins. *J. Neurochem.* 70: 971-982.

## CHROMOSOMAL LOCATION

Genetic locus: PRPH (human) mapping to 12q13.12; Prph1 (mouse) mapping to 15 F1.

## SOURCE

Peripherin (6H10) is a mouse monoclonal antibody raised against recombinant Peripherin of rat origin.

## PRODUCT

Each vial contains 250 µl culture supernatant containing IgG<sub>1</sub> with PBS and < 0.1% sodium azide.

## STORAGE

For immediate and continuous use, store at 4° C for up to one month. For sporadic use, freeze in working aliquots in order to avoid repeated freeze/thaw cycles. If turbidity is evident upon prolonged storage, clarify solution by centrifugation.

## APPLICATIONS

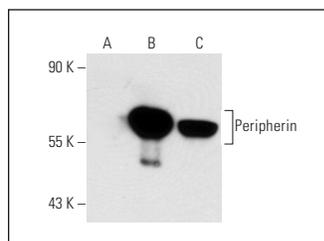
Peripherin (6H10) is recommended for detection of Peripherin of mouse, rat and human origin by Western Blotting (starting dilution to be determined by researcher, dilution range 1:500-1:2500), immunoprecipitation [10-20 µl per 100-500 µg of total protein (1 ml of cell lysate)] and immunofluorescence (starting dilution to be determined by researcher, dilution range 1:50-1:2500).

Suitable for use as control antibody for Peripherin siRNA (h): sc-36211, Peripherin siRNA (m): sc-36212, Peripherin shRNA Plasmid (h): sc-36211-SH, Peripherin shRNA Plasmid (m): sc-36212-SH, Peripherin shRNA (h) Lentiviral Particles: sc-36211-V and Peripherin shRNA (m) Lentiviral Particles: sc-36212-V.

Molecular Weight of Peripherin: 57 kDa.

Positive Controls: PC-12 cell lysate: sc-2250, rat spinal cord tissue extract: sc-395024 or Peripherin (m): 293T Lysate: sc-122490.

## DATA



Peripherin (6H10): sc-71880. Western blot analysis of Peripherin expression in non-transfected 293T: sc-117752 (A), mouse Peripherin transfected 293T: sc-122490 (B) and PC-12 (C) whole cell lysates.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.