# Peripherin (L-19): sc-30528



The Power to Question

#### **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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- 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 PC12 cells. J. Neurochem. 67: 1365-1374.
- 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.
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- 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; Prph (mouse) mapping to 15 F1.

# **SOURCE**

Peripherin (L-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Peripherin of human origin.

#### **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-30528 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

# **STORAGE**

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

#### **APPLICATIONS**

Peripherin (L-19) is recommended for detection of Peripherin of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Peripherin (L-19) is also recommended for detection of Peripherin in additional species, including equine, canine, bovine and porcine.

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, HeLa whole cell lysate: sc-2200 or Human colon carcinoma.

## **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

# **RESEARCH USE**

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

## **PROTOCOLS**

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **Peripherin (A-3):** sc-377093 or **Peripherin (6H10):** sc-71880, our highly recommended monoclonal alternatives to Peripherin (L-19).

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