SANTA CRUZ BIOTECHNOLOGY, INC.

# Peripherin (C-19): sc-7604

The Power to Question

## BACKGROUND

Peripherin is a type III intermediate filament protein 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.

## CHROMOSOMAL LOCATION

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

## SOURCE

Peripherin (C-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Peripherin of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-7604 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as PE conjugate for flow cytometry, sc-7604 PE, 100 tests.

Available as agarose conjugate for immunoprecipitation, sc-7604 AC, 500 µg/0.25 ml agarose in 1 ml.

## APPLICATIONS

Peripherin (C-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), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500), flow cytometry (1 µg per 1 x $10^6$ cells) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Peripherin (C-19) is also recommended for detection of Peripherin in additional species, including bovine.

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.

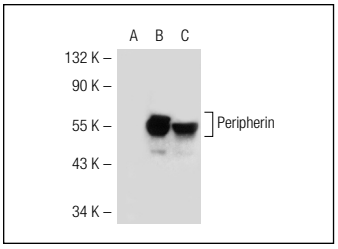
## STORAGE

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

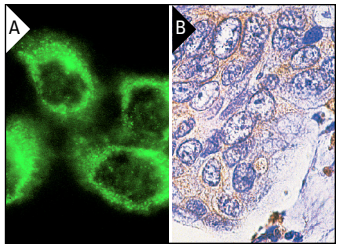
## RESEARCH USE

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

## DATA




Peripherin (C-19): sc-7604. 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.




Peripherin (C-19): sc-7604. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoskeletal localization (**B**). Immunoperoxidase staining of formalin-fixed, paraffin-embedded human colon carcinoma showing cytoskeletal localization (**B**).

## SELECT PRODUCT CITATIONS


1. Potrebic, S., et al. 2003. Peptidergic nociceptors of both trigeminal and dorsal root ganglia express Serotonin 1D receptors: implications for the selective antimigraine action of triptans. J. Neurosci. 23: 10988-10997.
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3. Hashimoto, Y., et al. 2009. The bHLH transcription factor Hand2 regulates the expression of nanog in ANS differentiation. Biochem. Biophys. Res. Commun. 390: 223-229.
4. Brehmer, A., et al. 2010. Two submucosal nerve plexus in human intestines. Histochem. Cell Biol. 133: 149-161.
5. Domange, C., et al. 2010. Longitudinal study of Australian stringhalt cases in France. J. Anim. Physiol. Anim. Nutr. 94: 712-720.
6. Kustermann, A., et al. 2011. Calretinin and somatostatin immunoreactivities label different human submucosal neuron populations. Anat. Rec. 294: 858-869.
7. Duarte, D.B., et al. 2011. Reduced expression of SynGAP, a neuronal GTPase-activating protein, enhances capsaicin-induced peripheral sensitization. J. Neurophysiol. 106: 309-318.
8. Kramer, K., et al. 2011. Quantitative evaluation of neurons in the mucosal plexus of adult human intestines. Histochem. Cell Biol. 136: 1-9.
9. Cogli, L., et al. 2013. Charcot-Marie-Tooth type 2B disease-causing RAB7A mutant proteins show altered interaction with the neuronal intermediate filament peripherin. Acta Neuropathol. 125: 257-272.



MONOS Satisfaction Guaranteed

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