SANTA CRUZ BIOTECHNOLOGY, INC.

Peripherin (m): 293T Lysate: sc-122490

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

1. Thompson, M.A. and Ziff, E.B. 1989. Structure of the gene encoding Peripherin, an NGF-regulated neuronal-specific type III intermediate filament protein. Neuron 2: 1043-1053.
2. Cui, C., Stambrook, P.J. and Parysek, L.M. 1995. Peripherin assembles into homopolymers in SW13 cells. J. Cell Sci. 108: 3279-3284.
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 (mouse) mapping to 15 F1.

PRODUCT

Peripherin (m): 293T Lysate represents a lysate of mouse Peripherin transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

Peripherin (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive Peripherin antibodies. Recommended use: 10-20 µl per lane.

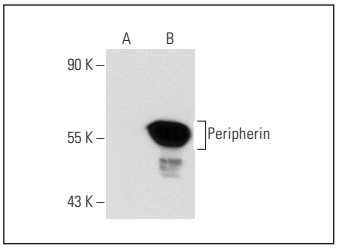
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Peripherin (8G2): sc-58834 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse Peripherin expression in Peripherin transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

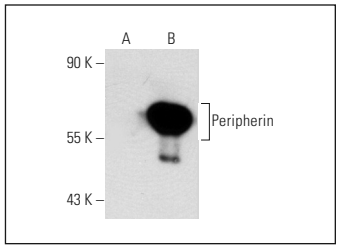
STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

DATA



Peripherin (8G2): sc-58834. Western blot analysis of Peripherin expression in non-transfected 293T: sc-117752 (**A**) and mouse Peripherin transfected 293T: sc-122490 (**B**) 293T whole cell lysates.



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

RESEARCH USE

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

PROTOCOLS

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