

PTN (m): 293T Lysate: sc-122837

BACKGROUND

Pleiotrophin (PTN) and midkine (MK) comprise a family of structurally related, developmentally regulated genes. Human PTN is synthesized as a 168 amino acid precursor which is subsequently cleaved to generate a 136 amino acid protein. Human PTN is approximately 50% identical to human MK, with conservation of all ten cysteines. Cells reported to express PTN include osteoblasts, chondrocytes, fibroblasts, astrocytes, oligodendroglia, Schwann cells, neurons, pituicytes and Leydig cells. PTN is a heparin-binding growth factor that functions as a weak mitogen and promotes neurite outgrowth from embryonic brain neurons. PTN is expressed at high levels in many tissues during fetal development but becomes restricted to the brain in adult animals.

REFERENCES

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- Chauhan, A.K., et al. 1993. Pleiotrophin transforms NIH/3T3 cells and induces tumors in nude mice. *Proc. Natl. Acad. Sci. USA* 90: 679-682.
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CHROMOSOMAL LOCATION

Genetic locus: Ptn (mouse) mapping to 6 B1.

PRODUCT

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

RESEARCH USE

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

APPLICATIONS

PTN (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive PTN 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.

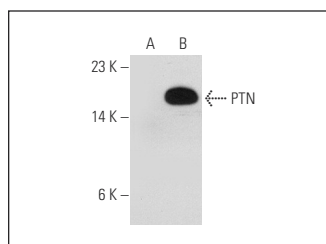
PTN (H-6): sc-74443 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse PTN expression in PTN transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:

1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



PTN (H-6): sc-74443. Western blot analysis of PTN expression in non-transfected: sc-117752 (A) and mouse PTN transfected: sc-122837 (B) 293T whole cell lysates.

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.

PROTOCOLS

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