PDGF-D (m): 293T Lysate: sc-122464



The Power to Question

BACKGROUND

Platelet-derived growth factor (PDGF) refers to a family of disulphide-bonded dimeric isoforms that are important for growth and survival, and which function in several types of connective tissue cell. There are four members of the PDGF family: PDGF-A, PDGF-B, PDGF-C and PDGF-D (spinal cord-derived growth factor-B or iris-expressed growth factor). Their biological effects are mediated via two tyrosine kinase receptors, PDGFR- α and PDGFR- β . PDGF-mediated signaling is critical for development of many organ systems. PDGF-D has a two-domain structure similar to PDGF-C and is secreted as a disulphide-linked homo-dimer, PDGF-DD. Upon limited proteolysis, PDGF-DD is activated and becomes a specific agonistic ligand for PDGFR- β . PDGF-D is expessed in fibroblastic adventitial cells, cultured endothelial cells and in a variety of tumor cell lines.

REFERENCES

- Bergsten, E., Uutela, M., Li, X., Pietras, K., Ostman, A., Heldin, C.H., Alitalo, K. and Eriksson, U. 2001. PDGF-D is a specific, protease-activated ligand for the PDGF-β-receptor. Nat. Cell Biol. 3: 512-516.
- LaRochelle, W.J., Jeffers, M., McDonald, W.F., Chillakuru, R.A., Giese, N.A., Lokker, N.A., Sullivan, C., Boldog, F.L., Yang, M., Vernet, C., Burgess, C.E., Fernandes, E., Deegler, L.L., Rittman, B., Shimkets, J., Shimkets, R.A., Rothberg, J.M. and Lichenstein, H.S. 2001. PDGF-D, a new protease-activated growth factor. Nat. Cell Biol. 3: 517-521.
- 3. Hamada, T., Ui-Tei, K., Imaki, J. and Miyata, Y. 2001. Molecular cloning of SCDGF-B, a novel growth factor homologous to SCDGF/PDGF-C/fallotein. Biochem. Biophys. Res. Commun. 280: 733-737.
- Uutela, M., Lauren, J., Bergsten, E., Li, X., Horelli-Kuitunen, N., Eriksson, U. and Alitalo, K. 2001. Chromosomal location, exon structure, and vascular expression patterns of the human PDGFC and PDGFC genes. Circulation 103: 2242-2247.
- Aase, K., Abramsson, A., Karlsson, L., Betsholtz, C. and Eriksson, U. 2002. Expression analysis of PDGF-C in adult and developing mouse tissues. Mech. Dev. 110: 187-191.

CHROMOSOMAL LOCATION

Genetic locus: Pdgfd (mouse) mapping to 9 A1.

PRODUCT

PDGF-D (m): 293T Lysate represents a lysate of mouse PDGF-D transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

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

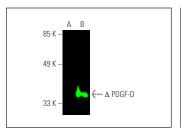
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

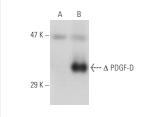
PDGF-D (E-7): sc-137029 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse PDGF-D expression in PDGF-D transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG κ BP-HRP: sc-516102 or m-lgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz MarkerTM Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA





PDGF-D (E-7): sc-137029. Near-infrared western blot analysis of PDGF-D expression in non-transfected: sc-117752 (**A**) and truncated mouse PDGF-D transfected: sc-122464 (**B**) 293T whole cell lysates. Blocked with UltraCruz® Blocking Reagent: sc-516214. Detection reagent used: m-lgG κ BP-CFL 680: sc-516180.

PDGF-D (E-7): sc-137029. Western blot analysis of PDGF-D expression in non-transfected: sc-117752 (A) and truncated mouse PDGF-D transfected: sc-122464 (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.

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.

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