

VEGF-D (h): 293T Lysate: sc-114175

BACKGROUND

The onset of angiogenesis is believed to be an early event in tumorigenesis and may facilitate tumor progression and metastasis. Several growth factors with angiogenic activity have been described. These include fibroblast growth factor (FGF), platelet derived growth factor (PDGF) and vascular endothelial growth factor (VEGF). Several forms of VEGF have been identified, including VEGF, VEGF-B, VEGF-C and VEGF-D (also designated FIGF). Characteristic of VEGF proteins, the central region of VEGF-D contains eight cysteine residues. These residues are essential for homodimerization. VEGF-D may play a role in tumor progression, as it is induced by c-Fos, which is required for conversion of early stage tumors to malignant tumors. It has been observed that overexpression of VEGF-D induces morphological changes in fibroblasts.

REFERENCES

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2. Folkman, J., Watson, K., Ingber, D. and Hanahan, D. 1989. Induction of angiogenesis during the transition from hyperplasia to neoplasia. *Nature* 339: 58-61.
3. Bouck, N. 1990. Tumor angiogenesis: the role of oncogenes and tumor suppressor genes. *Cancer Cells* 2: 179-185.
4. Ferrara, N., Houck, K.A., Jakeman, L.B., Winer, J. and Leung, D.W. 1991. The vascular endothelial growth factor family of polypeptides. *J. Cell. Biochem.* 47: 211-218.
5. Orlandini, M., Marconcini, L., Ferruzzi, R. and Oliviero, S. 1996. Identification of a c-Fos-induced gene that is related to the platelet-derived growth factor/vascular endothelial growth factor family. *Proc. Natl. Acad. Sci. USA* 93: 11675-11680.
6. Yamada, Y., Nezu, J., Shimane, M. and Hirata, Y. 1997. Molecular cloning of a novel vascular endothelial growth factor, VEGF-D. *Genomics* 42: 483-488.

CHROMOSOMAL LOCATION

Genetic locus: FIGF (human) mapping to Xp22.2.

PRODUCT

VEGF-D (h): 293T Lysate represents a lysate of human VEGF-D transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

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

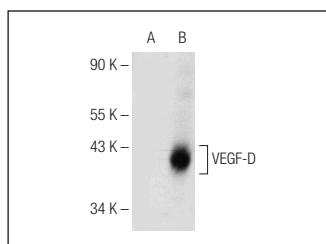
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

VEGF-D (C-12): sc-373866 is recommended as a positive control antibody for Western Blot analysis of enhanced human VEGF-D expression in VEGF-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-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



VEGF-D (C-12): sc-373866. Western blot analysis of VEGF-D expression in non-transfected: sc-117752 (A) and human VEGF-D transfected: sc-114175 (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.