# VEGF-C (h): 293T Lysate: sc-113917



The Power to Question

### **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). VEGF is a dimeric glycoprotein with structural homology to PDGF. Several variants of VEGF have been described that arise by alternative mRNA splicing. It has been speculated that VEGF may function as a tumor angiogenesis factor *in vivo*. Two additional proteins, designated VEGF-B and VEGF-C, share a significant degree of homology with VEGF. VEGF-B is abundantly expressed in heart and skeletal muscle and is frequently coexpressed with VEGF. VEGF-C binds to, and specifically activates, FIt-4 and FIk-1.

### **REFERENCES**

- Folkman, J., Watson, K., Ingber, D. and Hanahan, D. 1989. Induction of angiogenesis during the transition from hyperplasia to neoplasia. Nature 339: 58-61.
- 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.
- Plate, K.H., Breier, G., Welch, H.A. and Risau, W. 1992. Vascular endothelial growth factor is a potential tumour angiogenesis factor in human gliomas in vivo. Nature 359: 845-848.
- 4. Breier, G., Albrecht, U., Sterrer, S. and Risau, W. 1992. Expression of vascular endothelial growth factor during embryonic angiogenesis and endothelial cell differentiation. Development 114: 521-532.
- Berse, B., Brown, L.F., Van de Water, L., Dvorak, H.F. and Senger, D.R. 1992.
  Vascular permeability factor (vascular endothelial growth factor) gene is expressed differentially in normal tissues, macrophages and tumors. Mol. Biol. Cell 3: 211-220.
- Olofsson, B., Pajusola, K., Kaipainen, A., von Euler, G., Joukov, V., Saksela, O., Orpana, A., Pettersson, R.F., Alitalo, K. and Eriksson, U. 1996. Vascular endothelial growth factor B, a novel growth factor for endothelial cells. Proc. Natl. Acad. Sci. USA 93: 2576-2581.
- Joukov, V., Pajusola, K., Kaipainen, A., Chilov, D., Lahtinen, I., Kukk, E., Saksela, O., Kalkkinen, N. and Alitalo, K. 1996. A novel vascular endothelial growth factor, VEGF-C, is a ligand for the Flt-4 (VEGFR-3) and KDR (VEGFR-2) receptor tyrosine kinases. EMBO J. 15: 290-298.
- Paavonen, K., Horelli-Kuitunen, N., Chilov, D., Kukk, E., Pennanen, S., Kallioniemi, O.P., Pajusola, K., Olofsson, B., Eriksson, U. and Joukov, V. 1996. Novel human vascular endothelial growth factor genes VEGF-B and VEGF-C localize to chromosomes 11q13 and 4q34, respectively. Circulation 93: 1079-1082.

## **CHROMOSOMAL LOCATION**

Genetic locus: VEGFC (human) mapping to 4g34.3.

## **RESEARCH USE**

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

#### **PRODUCT**

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

### **APPLICATIONS**

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

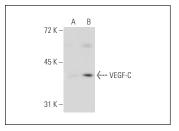
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-tranfected 293T cells.

VEGF-C (A-5): sc-74584 is recommended as a positive control antibody for Western Blot analysis of enhanced human VEGF-C expression in VEGF-C 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 $\kappa$  BP-HRP: sc-516102 or m-lgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>TM</sup> Molecular Weight Standards: sc-2035, UltraCruz<sup>®</sup> Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

### **DATA**



VEGF-C (A-5): sc-74584. Western blot analysis of VEGF-C expression in non-transfected: sc-117752 (A) and human VEGF-C transfected: sc-113917 (B) 293T whole cell Ivsates.

## **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.

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