SANTA CRUZ BIOTECHNOLOGY, INC.

VEGF-C (h2): 293T Lysate: sc-116733

SANTA CRUZ BIOTECHNOLOGY

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 Flt-4 and Flk-1. The genes that encode VEGF-B and VEGF-C have been localized to chromosomes 11q13.1 and 4q34.3, respectively.

REFERENCES

1. Folkman, J., et al. 1989. Induction of angiogenesis during the transition from hyperplasia to neoplasia. Nature 339: 58-61.
2. Ferrara, N., et al. 1991. The vascular endothelial growth factor family of polypeptides. J. Cell. Biochem. 47: 211-218.
3. Plate, K.H., et al. 1992. Vascular endothelial growth factor is a potential tumour angiogenesis factor in human gliomas *in vivo*. Nature 359: 845-848.
4. Breier, G., et al. 1992. Expression of vascular endothelial growth factor during embryonic angiogenesis andendothelial cell differentiation. Development 114: 521-532.
5. Berse, B., et al. 1992. Vascular permeability factor (vascular endothelial growth factor) gene is expressed differentially in normal tissues, macrophages and tumors. Mol. Biol. Cell 3: 211-220.
6. Olofsson, B., et al. 1996. Vascular endothelial growth factor B, a novel growth factor for endothelial cells. Proc. Natl. Acad. Sci. USA 93: 2576-2581.
7. Joukov, V., et al. 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.

CHROMOSOMAL LOCATION

Genetic locus: VEGFC (human) mapping to 4q34.3.

PRODUCT

VEGF-C (h2): 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.

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.

APPLICATIONS

VEGF-C (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive VEGF-C antibodies. Recommended use: 10-20 µl per lane.

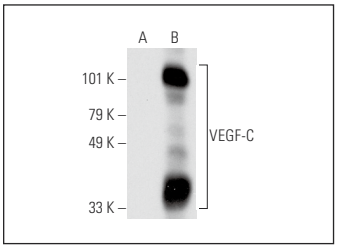
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

VEGF-C (F-10): sc-74585 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).

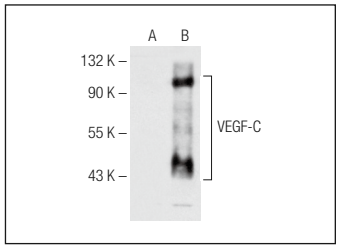
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-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-C (F-10): sc-74585. Western blot analysis of VEGF-C expression in non-transfected: sc-117752 (**A**) and human VEGF-C transfected: sc-116733 (**B**) 293T whole cell lysates.



VEGF-C (E-6): sc-374628. Western blot analysis of VEGF-C expression in non-transfected: sc-117752 (**A**) and human VEGF-C transfected: sc-116733 (**B**) 293T whole cell lysates.

RESEARCH USE

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