SANTA CRUZ BIOTECHNOLOGY, INC.

VEGF-C (H-190): sc-9047

SANTA CRUZ BIOTECHNOLOGY
The Power to Question

BACKGROUND

vent 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.

CHROMOSOMAL LOCATION

Genetic locus: VEGFC (human) mapping to 4q34.3; Vegfc (mouse) mapping to 8 B1.3.

SOURCE

VEGF-C (H-190) is a rabbit polyclonal antibody raised against amino acids 230-419 of VEGF-C of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

VEGF-C (H-190) is recommended for detection of precursor VEGF-C of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

VEGF-C (H-190) is also recommended for detection of precursor VEGF-C in additional species, including equine, canine and porcine.

Suitable for use as control antibody for VEGF-C siRNA (h): sc-39842, VEGF-C siRNA (m): sc-39843, VEGF-C shRNA Plasmid (h): sc-39842-SH, VEGF-C shRNA Plasmid (m): sc-39843-SH, VEGF-C shRNA (h) Lentiviral Particles: sc-39842-V and VEGF-C shRNA (m) Lentiviral Particles: sc-39843-V.

Molecular Weight of VEGF-C: 40/80 kDa.

Positive Controls: MCF7 whole cell lysate: sc-2206, RAW 264.7 whole cell lysate: sc-2211 or mouse brain extract: sc-2253.

RESEARCH USE

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

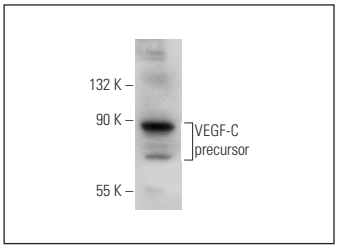
PROTOCOLS

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

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

DATA



VEGF-C (H-190): sc-9047. Western blot analysis of VEGF-C expression in MCF7 whole cell lysate.

SELECT PRODUCT CITATIONS

1. Tille, J.C., et al. 2001. Vascular endothelial growth factor (VEGF) receptor-2 antagonists inhibit VEGF- and basic fibroblast growth factor-induced angiogenesis *in vivo* and *in vitro*. J. Pharmacol. Exp. Ther. 299: 1073-1083.
2. Detoraki, A., et al. 2009. Vascular endothelial growth factors synthesized by human lung mast cells exert angiogenic effects. J. Allergy Clin. Immunol. 123: 1142-1149.
3. Sie, M., et al. 2009. The angiopoietin 1/angiopoietin 2 balance as a prognostic marker in primary glioblastoma multiforme. J. Neurosurg. 110: 147-155.
4. Dorevic, G., et al. 2009. Hypoxia inducible factor-1alpha correlates with vascular endothelial growth factor A and C indicating worse prognosis in clear cell renal cell carcinoma. J. Exp. Clin. Cancer Res. 28: 40.
5. Müller-Deile, J., et al. 2009. The balance of autocrine VEGF-A and VEGF-C determines podocyte survival. Am. J. Physiol. Renal Physiol. 297: F1656-F1667.
6. Granata, F., et al. 2010. Production of vascular endothelial growth factors from human lung macrophages induced by group IIA and group X secreted phospholipases A_2. J. Immunol. 184: 5232-5241.
7. Trebec-Reynolds, D.P., et al. 2010. VEGF-A expression in osteoclasts is regulated by NFκB induction of HIF-1α. J. Cell. Biochem. 110: 343-351.
8. Ghosh, S., et al. 2010. Urinary-type plasminogen activator receptor/α3β1 integrin signaling, altered gene expression, and oral tumor progression. Mol. Cancer Res. 8: 145-158.
9. Frewer, N., et al. 2013. Potential implication of IL-24 in lymphangiogenesis of human breast cancer. Int. J. Mol. Med. 31: 1097-1104.