

VEGF-D (28AT743.288.48): sc-517375

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; Vegfd (mouse) mapping to X F5.

SOURCE

VEGF-D (28AT743.288.48) is a mouse monoclonal antibody raised against purified His-tagged VEGF-D protein fragment of human origin.

PRODUCT

Each vial contains 100 µg IgG₁ in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

APPLICATIONS

VEGF-D (28AT743.288.48) is recommended for detection of VEGF-D of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000).

Suitable for use as control antibody for VEGF-D siRNA (h): sc-39844, VEGF-D siRNA (m): sc-39845, VEGF-D shRNA Plasmid (h): sc-39844-SH, VEGF-D shRNA Plasmid (m): sc-39845-SH, VEGF-D shRNA (h) Lentiviral Particles: sc-39844-V and VEGF-D shRNA (m) Lentiviral Particles: sc-39845-V.

Molecular Weight of VEGF-D: 40 kDa.

Molecular Weight of processed VEGF-D: 21 kDa.

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.