SANTA CRUZ BIOTECHNOLOGY, INC.

VEGF-D (H-45): sc-25784

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). 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

1. Folkman, J. and Klagsburn, M. 1987. Angiogenic factors. Science 235: 442-447.
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.

CHROMOSOMAL LOCATION

Genetic locus: FIGF (human) mapping to Xp22.2; Figf (mouse) mapping to X F5.

SOURCE

VEGF-D (H-45) is a rabbit polyclonal antibody raised against amino acids 158-202 of VEGF-D 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-D (H-45) is recommended for detection of precursor and mature VEGF-D 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-D (H-45) is also recommended for detection of precursor and mature VEGF-D in additional species, including equine, canine, bovine and porcine.

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 processed VEGF-D: 21 kDa.

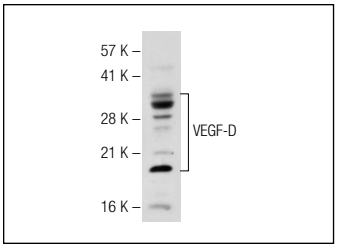
Molecular Weight of VEGF-D: 40 kDa.

Positive Controls: MCF7 whole cell lysate: sc-2206.

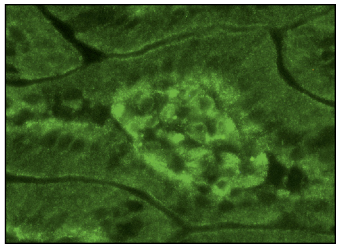
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



VEGF-D (H-45): sc-25784. Western blot analysis of VEGF-D expression in MCF7 whole cell lysate.



VEGF-D (H-45): sc-25784. Immunofluorescence staining of normal mouse intestine frozen section showing cytoplasmic staining.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. 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 or our catalog for detailed protocols and support products.