



VEGI (6E6): sc-53779

BACKGROUND

Vascular endothelial cell growth inhibitor (VEGI), also known as TNFRSF15 or TL1, a member of the TNF superfamily, has a signaling pathway similar to TNF and is most likely a multifunctional cytokine. VEGI is found in brain, reproductive and late developmental stage embryonic tissues and expressed predominantly in endothelial cells. It is an angiogenesis inhibitor of the TNF family and functions in part by directly inhibiting endothelial cell proliferation. VEGI may act as an autocrine factor to induce apoptosis in endothelial cells via activation of multiple signaling pathways, including stress protein kinases as well as certain caspases.

REFERENCES

1. Tan, K.B., et al. 1997. Characterization of a novel TNF-like ligand and recently described TNF ligand and TNF receptor superfamily genes and their constitutive and inducible expression in hematopoietic and non-hematopoietic cells. *Gene* 204: 35-46.
2. Haridas, V., et al. 1999. VEGI, a new member of the TNF family activates nuclear factor κ B and c-Jun N-terminal kinase and modulates cell growth. *Oncogene* 18: 6496-6504.
3. Hu, S., et al. 1999. Characterization of TNFRSF19, a novel member of the tumor necrosis factor receptor superfamily. *Genomics* 62: 103-107.
4. Zhai, Y., et al. 1999. Inhibition of angiogenesis and breast cancer xenograft tumor growth by VEGI, a novel cytokine of the TNF superfamily. *Int. J. Cancer* 82: 131-136.
5. Zhai, Y., et al. 1999. VEGI, a novel cytokine of the tumor necrosis factor family, is an angiogenesis inhibitor that suppresses the growth of colon carcinomas *in vivo*. *FASEB J.* 13: 181-189.
6. Yue, T.L., et al. 1999. TL1, a novel tumor necrosis factor-like cytokine, induces apoptosis in endothelial cells. Involvement of activation of stress protein kinases (stress-activated protein kinase and p38 mitogen-activated protein kinase) and caspase-3-like protease. *J. Biol. Chem.* 274: 1479-1486.

CHROMOSOMAL LOCATION

Genetic locus: TNFSF15 (human) mapping to 9q32; Tnfsf15 (mouse) mapping to 4 C1.

SOURCE

VEGI (6E6) is a mouse monoclonal antibody raised against VEGI of human origin.

PRODUCT

Each vial contains 200 μ g 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

VEGI (6E6) is recommended for detection of VEGI of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1–2 μ g per 100–500 μ g of total protein (1 ml of cell lysate)].

Suitable for use as control antibody for VEGI siRNA (h): sc-39846.

Molecular Weight of VEGI: 22 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (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) Immunofluorescence: use goat anti-mouse IgG-FITC: sc-2010 (dilution range: 1:100-1:400) or goat anti-mouse IgG-TR: sc-2781 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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.