

VEGI (1A3): sc-53975

BACKGROUND

Vascular endothelial cell growth inhibitor (VEGI), also known as TNFRSF15 or TL1, is a member of the TNF superfamily. VEGI 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 is 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 and 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.

CHROMOSOMAL LOCATION

Genetic locus: TNFSF15 (human) mapping to 9q32.

SOURCE

VEGI (1A3) is a mouse monoclonal antibody raised against recombinant full length VEGI of human origin.

PRODUCT

Each vial contains 200 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

VEGI (1A3) is available conjugated to agarose (sc-53975 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-53975 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-53975 PE), fluorescein (sc-53975 FITC), Alexa Fluor® 488 (sc-53975 AF488), Alexa Fluor® 546 (sc-53975 AF546), Alexa Fluor® 594 (sc-53975 AF594) or Alexa Fluor® 647 (sc-53975 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-53975 AF680) or Alexa Fluor® 790 (sc-53975 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

VEGI (1A3) is recommended for detection of VEGI of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), flow cytometry (1 μ g per 1 x 10⁶ cells) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

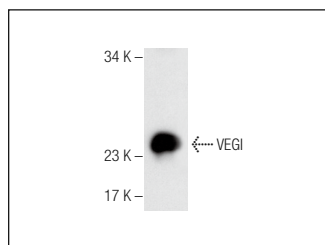
Suitable for use as control antibody for VEGI siRNA (h): sc-39846, VEGI shRNA Plasmid (h): sc-39846-SH and VEGI shRNA (h) Lentiviral Particles: sc-39846-V.

Molecular Weight of VEGI: 22 kDa.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



VEGI (1A3): sc-53975. Western blot analysis of human recombinant VEGI.

SELECT PRODUCT CITATIONS

1. Zhang, N., et al. 2009. Vascular endothelial growth inhibitor, expression in human prostate cancer tissue and the impact on adhesion and migration of prostate cancer cells *in vitro*. *Int. J. Oncol.* 35: 1473-1480.
2. Zhang, N., et al. 2010. Expression of vascular endothelial growth inhibitor (VEGI) in human urothelial cancer of the bladder and its effects on the adhesion and migration of bladder cancer cells *in vitro*. *Anticancer Res.* 30: 87-95.
3. Zhang, N., et al. 2013. Suppression of renal cell carcinoma growth *in vivo* by forced expression of vascular endothelial growth inhibitor. *Int. J. Oncol.* 42: 1664-1673.
4. Kumanishi, S., et al. 2019. Epigenetic modulators hydralazine and sodium valproate act synergistically in VEGI-mediated anti-angiogenesis and VEGF interference in human osteosarcoma and vascular endothelial cells. *Int. J. Oncol.* 55: 167-178.

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 for detailed protocols and support products.

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