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VEGFC Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP2042d

Product Information

Application	WB, FC, E
Primary Accession	P49767
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	46883

Additional Information

Gene ID	7424
Other Names	Vascular endothelial growth factor C, VEGF-C, Flt4 ligand, Flt4-L, Vascular endothelial growth factor-related protein, VRP, VEGFC
Target/Specificity	This VEGFC antibody is generated from rabbits immunized with VEGFC recombinant protein.
Dilution	WB~~1:1000 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	VEGFC Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	VEGFC
Function	Growth factor active in angiogenesis, and endothelial cell growth, stimulating their proliferation and migration and also has effects on the permeability of blood vessels. May function in angiogenesis of the venous and lymphatic vascular systems during embryogenesis, and also in the maintenance of differentiated lymphatic endothelium in adults. Binds and activates KDR/VEGFR2 and FLT4/VEGFR3 receptors. Secreted.

Cellular Location	
Tissue Location	Expressed in the spleen (PubMed:8700872, PubMed:9247316). Expressed in the lymph node, thymus, appendix and bone marrow (PubMed:9247316). Expressed in the heart, placenta, skeletal muscle, ovary and small intestine (PubMed:8617204, PubMed:8700872) Expressed in the prostate, testis and colon (PubMed:8700872)

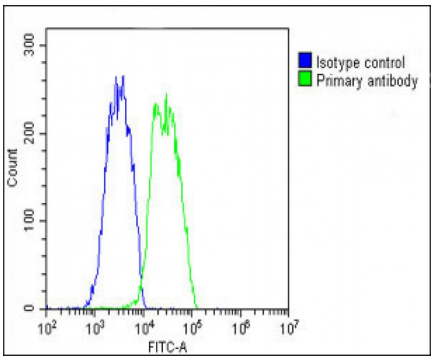
Background

VEGF3 is a member of the platelet-derived growth factor/vascular endothelial growth factor (PDGF/VEGF) family, is active in angiogenesis and endothelial cell growth, and can also affect the permeability of blood vessels. This secreted protein undergoes a complex proteolytic maturation, generating multiple processed forms which bind and activate VEGFR-3 receptors. Only the fully processed form can bind and activate VEGFR-2 receptors. This protein is structurally and functionally similar to vascular endothelial growth factor D.

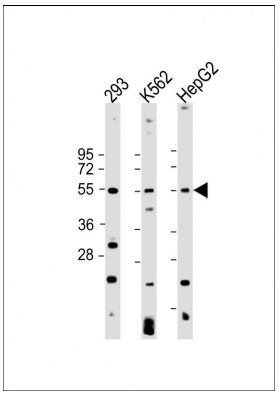
References

Byeon, J.S., et al., J. Gastroenterol. Hepatol. 19(6):648-654 (2004). Su, J.L., et al., Cancer Res. 64(2):554-564 (2004). Yan, C., et al., World J. Gastroenterol. 10(6):783-790 (2004). Hsieh, C.Y., et al., J. Biomed. Sci. 11(2):249-259 (2004). Liu, X.E., et al., World J. Gastroenterol. 10(3):352-355 (2004).

Images



Overlay histogram showing HepG2 cells stained with AP2042d(green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP2042d, 1:25 dilution) for 60 min at 37°C. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(OH191631) at 1/200 dilution for 40 min at 37°C. Isotype control antibody (blue line) was rabbit IgG1 (1µg/1x10^6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.



All lanes : Anti-VEGFC Antibody at 1:2000 dilution Lane 1: 293 whole cell lysate Lane 2: K562 whole cell lysate Lane 3: HepG2 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 47 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Citations

- Anti-metastatic Efficacy of Traditional Chinese Medicine (TCM) Ginsenoside Conjugated to a VEFGR-3 Antibody on Human Gastric Cancer in an Orthotopic Mouse Model.

- Concurrent Expression of VEGF-C and Neuropilin-2 Is Correlated with Poor Prognosis in Glioblastoma.
- Progranulin promotes colorectal cancer proliferation and angiogenesis through TNFR2/Akt and ERK signaling pathways.
- High expression of Dickkopf-related protein 1 is related to lymphatic metastasis and indicates poor prognosis in intrahepatic cholangiocarcinoma patients after surgery.
- MicroRNA-1826 targets VEGFC, beta-catenin (CTNNB1) and MEK1 (MAP2K1) in human bladder cancer.