

#### **VEGFC Antibody**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP2042d

#### Specification

## VEGFC Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Isotype WB, FC,E P49767 Human Rabbit Polyclonal Rabbit IgG

#### **VEGFC Antibody - 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~~1:2000 FC~~1:25 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.

## VEGFC Antibody - 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.

Cellular Location Secreted.

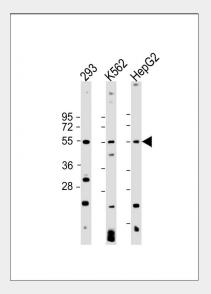
**Tissue Location** 

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)

## **VEGFC Antibody - Protocols**

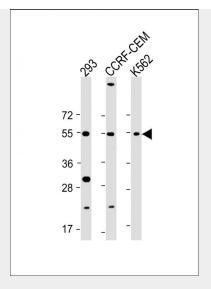
Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>
- **VEGFC Antibody Images**

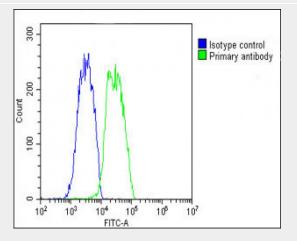


All lanes : Anti-VEGFC Antibody at 1:2000 dilution Lane 1: 293 whole cell lysate Lane 2: K562 whole cell lysate Lane 3: HepG2 whole cell lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 47 kDa Blocking/Dilution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





All lanes : Anti-VEGFC Antibody at 1:2000 dilution Lane 1: 293 whole cell lysate Lane 2: CCRF-CEM whole cell lysate Lane 3: K562 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.



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 Goat-Anti-Rabbit **DyLight**® 488 antibody used was lgG, Conjugated Highly Cross-Adsorbed(OH191631) at 1/200 dilution for 40 min at 37ºC. Isotype control antibody (blue line) was rabbit IgG1 ( $1\mu$ g/1x10^6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.

# VEGFC Antibody - 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.

## VEGFC Antibody - 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).

## VEGFC Antibody - 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 <u>Glioblastoma.</u>
- <u>Progranulin promotes colorectal cancer proliferation and angiogenesis through TNFR2/Akt</u> 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.
- <u>MicroRNA-1826 targets VEGFC, beta-catenin (CTNNB1) and MEK1 (MAP2K1) in human</u> <u>bladder cancer.</u>