

### **VEGFB (VEGF2) Antibody (Center)**

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6293C

### **Specification**

## VEGFB (VEGF2) Antibody (Center) - Product Information

**Application** IHC-P, WB,E **Primary Accession** P49765 Other Accession Q16528 Reactivity Human Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 21602 Antigen Region 110-139

### VEGFB (VEGF2) Antibody (Center) - Additional Information

#### **Gene ID 7423**

### **Other Names**

Vascular endothelial growth factor B, VEGF-B, VEGF-related factor, VRF, VEGFB, VRF

### Target/Specificity

This VEGFB (VEGF2) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 110-139 amino acids from the Central region of human VEGFB (VEGF2).

# **Dilution**

IHC-P~~1:10~50 WB~~1:1000

E~~Use at an assay dependent concentration.

#### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

#### 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**

VEGFB (VEGF2) Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

# VEGFB (VEGF2) Antibody (Center) - Protein Information

### Name VEGFB





Synonyms VRF

**Function** Growth factor for endothelial cells. VEGF-B167 binds heparin and neuropilin-1 whereas the binding to neuropilin-1 of VEGF-B186 is regulated by proteolysis.

#### **Cellular Location**

Secreted. Note=Secreted but remains associated to cells or to the extracellular matrix unless released by heparin

## **Tissue Location**

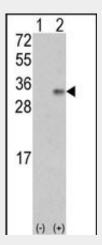
Expressed in all tissues except liver. Highest levels found in heart, skeletal muscle and pancreas

## **VEGFB (VEGF2) Antibody (Center) - Protocols**

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

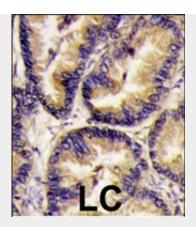
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# VEGFB (VEGF2) Antibody (Center) - Images



Western blot analysis of VEGF2 (arrow) using rabbit polyclonal VEGF2 Antibody (Center)(Cat. #AP6293c). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the VEGF2 gene (Lane 2) (Origene Technologies).





Formalin-fixed and paraffin-embedded human lung carcinoma tissue reacted with VEGF2 antibody (Center)(Cat.#AP6293c), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

# VEGFB (VEGF2) Antibody (Center) - Background

Vascular endothelial growth factors (VEGFs) are a family of closely related growth factors having a conserved pattern of eight cysteine residues and sharing common VEGF receptors. VEGFs stimulate endothelial cells, induce angiogenesis, promote cell migration, increase vascular permeability, and inhibit apoptosis. VEGFB has structural similarities to VEGF and PIGF and is frequently co-expressed with VEGF. There are two alternatively spliced isoforms of VEGFB: VEGFB 167 and VEGFB 186. VEGFB 167, a highly basic heparin-binding protein, remains with the cell or extracellular matrix whereas, VEGFB 186 is readily secreted. VEGFB stimulates endothelial cell proliferation. VEGFB binds to the tyrosine kinase receptor VEGFR1 (flt1) and does not bind to VEGFR2. Vascular Endothelial Growth Factor B is widely expressed but is most abundant in heart, skeletal muscle, and pancreas. It has been suggested that VEGFB expression in human primary breast cancers is associated with lymph node metastasis. The genes that encode VEGFB have been mapped to chromosome 11q13.

# VEGFB (VEGF2) Antibody (Center) - References

Trompezinski, S., et al., Exp. Dermatol. 13(2):98-105 (2004). Qi, J.H., et al., Nat. Med. 9(4):407-415 (2003). Joukov, V., et al., J. Cell. Physiol. 173(2):211-215 (1997). Olofsson, B., et al., J. Biol. Chem. 271(32):19310-19317 (1996). Olofsson, B., et al., Proc. Natl. Acad. Sci. U.S.A. 93(6):2576-2581 (1996).