

## Summary

<b>Production Name</b>	VEGF-A Rabbit Polyclonal Antibody
<b>Description</b>	Rabbit Polyclonal Antibody
<b>Host</b>	Rabbit
<b>Application</b>	IHC,IF,
<b>Reactivity</b>	Human,Mouse,Rat,Pig,Rabbit

## Performance

<b>Conjugation</b>	Unconjugated
<b>Modification</b>	Unmodified
<b>Isotype</b>	IgG
<b>Clonality</b>	Polyclonal
<b>Form</b>	Liquid
<b>Storage</b>	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
<b>Buffer</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
<b>Purification</b>	Affinity purification

## Immunogen

<b>Gene Name</b>	VEGFA
<b>Alternative Names</b>	VEGFA; VEGF; Vascular endothelial growth factor A; VEGF-A; Vascular permeability factor; VPF
<b>Gene ID</b>	7422.0
<b>SwissProt ID</b>	P15692.The antiserum was produced against synthesized peptide derived from human VEGF-A. AA range:110-159

## Application

<b>Dilution Ratio</b>	IF 1:50-200 IHC 1:100 - 1:300. ELISA: 1:10000. Not yet tested in other applications.
<b>Molecular Weight</b>	21kD(monomer),42kD(dimer)

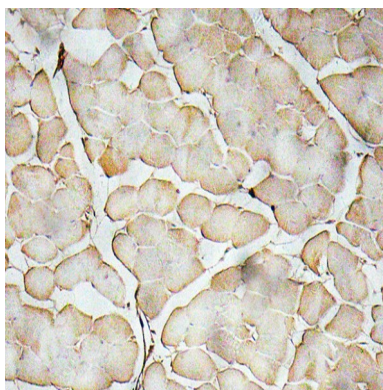
## Background

This gene is a member of the PDGF/VEGF growth factor family. It encodes a heparin-binding protein, which exists as a disulfide-linked homodimer. This growth factor induces proliferation and migration of vascular endothelial cells, and is essential for both physiological and pathological angiogenesis. Disruption of this gene in mice resulted in abnormal embryonic blood vessel formation. This gene is upregulated in many known tumors and its expression is correlated with tumor stage and progression. Elevated levels of this protein are found in patients with POEMS syndrome, also known as Crow-Fukase syndrome. Allelic variants of this gene have been associated with microvascular complications of diabetes 1 (MVCD1) and atherosclerosis. Alternatively spliced transcript variants encoding different isoforms have been described. There is also evidence for alternative translation initiation function: Growth factor active in angiogenesis, vasculogenesis and endothelial cell growth. Induces endothelial cell proliferation, promotes cell migration, inhibits apoptosis, and induces permeabilization of blood vessels. Binds to the VEGFR1/Flt-1 and VEGFR2/Kdr receptors, heparan sulfate and heparin. Neuropilin-1 binds isoforms VEGF-165 and VEGF-145. Isoform VEGF165B binds to VEGFR2/Kdr but doesn't activate downstream signaling pathways, doesn't activate angiogenesis and inhibits tumor growth., induction: Regulated by growth factors, cytokines, gonadotropins, nitric oxide, hypoxia, hypoglycemia and oncogenic mutations., online information: VEGF entry, similarity: Belongs to the PDGF/VEGF growth factor family., subcellular location: VEGF121 is acidic and freely secreted. VEGF165 is more basic, has heparin-binding properties and, although a significant proportion remains cell-associated, most is freely secreted. VEGF189 is very basic, it is cell-associated after secretion and is bound avidly by heparin and the extracellular matrix, although it may be released as a soluble form by heparin, heparinase or plasmin., subunit: Homodimer; disulfide-linked. Also found as heterodimer with PlGF., tissue specificity: The VEGF189, VEGF-165 and VEGF-121 isoforms are widely expressed, whereas the VEGF206 and VEGF-145 are uncommon.,

## Research Area

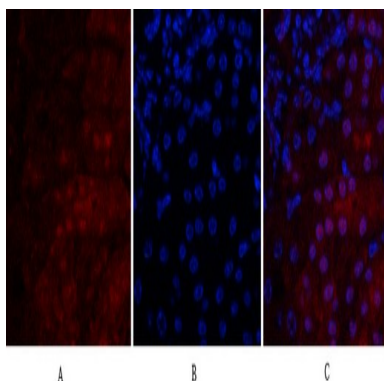
Cytokine-cytokine receptor interaction; mTOR; VEGF; Focal adhesion; Pathways in cancer; Renal cell carcinoma; Pancreatic cancer; Bladder cancer;

## Image Data

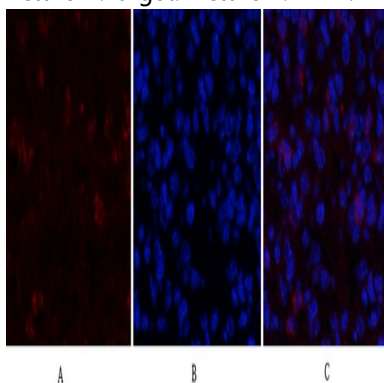


Immunohistochemistry analysis of VEGF-A antibody in paraffin-embedded human skeletal muscle tissue.

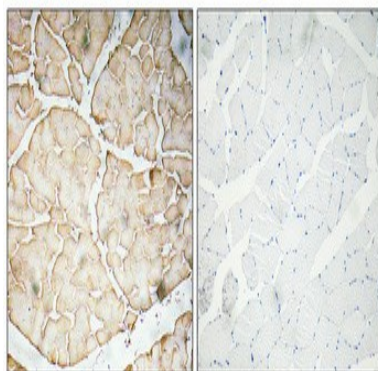
**Product Name: VEGF-A Rabbit Polyclonal Antibody**  
**Catalog #: APRab19771**



Immunofluorescence analysis of mouse-kidney tissue. 1, VEGF-A Polyclonal Antibody (red) was diluted at 1:200 (4°C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50min). 3, Picture B: DAPI (blue) 10min. Picture A: Target. Picture B: DAPI. Picture C: merge of A+B



Immunofluorescence analysis of mouse-spleen tissue. 1, VEGF-A Polyclonal Antibody (red) was diluted at 1:200 (4°C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50min). 3, Picture B: DAPI (blue) 10min. Picture A: Target. Picture B: DAPI. Picture C: merge of A+B



Immunohistochemical analysis of paraffin-embedded Human skeletal muscle. Antibody was diluted at 1:100 (4°C, overnight). High-pressure and temperature Tris-EDTA, pH 8.0 was used for antigen retrieval. Negative control (right) obtained from antibody was pre-absorbed by immunogen peptide.

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**Note**

For research use only.