

## **VEGF-A Polyclonal Antibody**

**Catalog # AP73053** 

#### **Specification**

## **VEGF-A Polyclonal Antibody - Product Information**

Application WB, IHC-P, IF Primary Accession P15692

Reactivity Human, Mouse, Rat

Host Rabbit Clonality Polyclonal

# **VEGF-A Polyclonal Antibody - Additional Information**

**Gene ID 7422** 

#### **Other Names**

VEGFA; VEGF; Vascular endothelial growth factor A; VEGF-A; Vascular permeability factor; VPF

#### **Dilution**

WB~~1:1000 IHC-P~~N/A

IF $\sim$ IF: 1:50-200 Immunohistochemistry: 1/100 - 1/300. ELISA: 1/10000. Not yet tested in other applications.

### **Format**

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

### **Storage Conditions**

-20°C

## **VEGF-A Polyclonal Antibody - Protein Information**

### **Name VEGFA**

**Synonyms VEGF** 

### **Function**

[N-VEGF]: Participates in the induction of key genes involved in the response to hypoxia and in the induction of angiogenesis such as HIF1A (PubMed:<a

href="http://www.uniprot.org/citations/35455969" target="\_blank">35455969</a>). Involved in protecting cells from hypoxia- mediated cell death (By similarity).

#### **Cellular Location**

[N-VEGF]: Cytoplasm. Nucleus. Note=Cytoplasmic in normoxic conditions and localizes to the nucleus under hypoxic conditions [Isoform L-VEGF189]: Endoplasmic reticulum. Golgi apparatus. Secreted, extracellular space, extracellular matrix [Isoform VEGF165]: Secreted

## **Tissue Location**



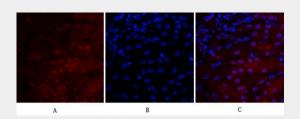
Higher expression in pituitary tumors than the pituitary gland. [Isoform VEGF165]: Widely expressed. [Isoform VEGF206]: Not widely expressed.

## **VEGF-A Polyclonal Antibody - Protocols**

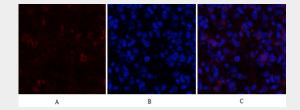
Provided below are standard protocols that you may find useful for product applications.

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

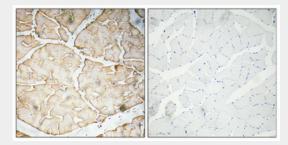
## **VEGF-A Polyclonal Antibody - Images**



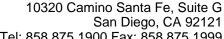
Immunofluorescence analysis of mouse-kidney tissue. 1,VEGF-A Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



Immunofluorescence analysis of mouse-spleen tissue. 1,VEGF-A Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled 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  $1:100(4^{\circ}, overnight)$ . High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negetive contrl (right) obtaned from antibody was pre-absorbed by immunogen





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peptide.

## **VEGF-A Polyclonal Antibody - Background**

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 FLT1/VEGFR1 and KDR/VEGFR2 receptors, heparan sulfate and heparin. NRP1/Neuropilin-1 binds isoforms VEGF-165 and VEGF-145. Isoform VEGF165B binds to KDR but does not activate downstream signaling pathways, does not activate angiogenesis and inhibits tumor growth. Binding to NRP1 receptor initiates a signaling pathway needed for motor neuron axon guidance and cell body migration, including for the caudal migration of facial motor neurons from rhombomere 4 to rhombomere 6 during embryonic development (By similarity).