10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# VEGF-A Polyclonal Antibody

Catalog # AP73053

## Product Information

| | |
|---|---|
| **Application** | WB, IF, ICC, IHC-P, E |
| **Primary Accession** | P15692 |
| **Reactivity** | Human, Mouse, Rat, Pig, Rabbit |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Calculated MW** | 43597 |

## Additional Information

| | |
|---|---|
| **Gene ID** | 7422 |
| **Other Names** | VEGFA; VEGF; Vascular endothelial growth factor A; VEGF-A; Vascular permeability factor; VPF |
| **Dilution** | WB~~1:1000 IF~~IF: 1:50-200 Immunohistochemistry: 1/100 - 1/300. ELISA: 1/10000. Not yet tested in other applications. ICC~~N/A IHC-P~~IF: 1:50-200 Immunohistochemistry: 1/100 - 1/300. ELISA: 1/10000. Not yet tested in other applications. E~~N/A |
| **Format** | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide. |
| **Storage Conditions** | -20℃ |

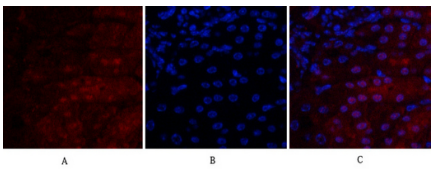
## Protein Information

| | |
|---|---|
| **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:35455969). 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. |

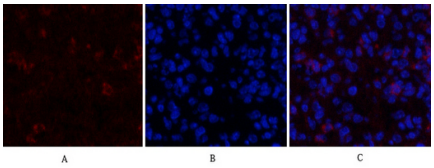
## Background

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).

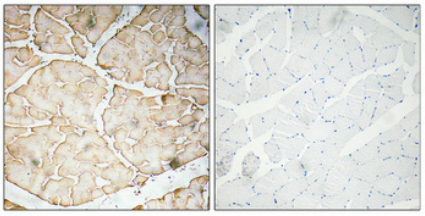
## Images




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°,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 peptide.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.