

Anti-VEGF Antibody
Catalog # ABO10563**Specification**

Anti-VEGF Antibody - Product Information

Application	WB, IHC-P
Primary Accession	P15692
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Vascular endothelial growth factor A(VEGFA) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-VEGF Antibody - Additional Information

Gene ID 7422

Other Names

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

Calculated MW

27042 MW KDa

Application Details

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Rat, Human, Mouse, By Heat
Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

Subcellular Localization

Secreted . 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.

Tissue Specificity

Isoform VEGF189, isoform VEGF165 and isoform VEGF121 are widely expressed. Isoform VEGF206 and isoform VEGF145 are not widely expressed. A higher level expression seen in pituitary tumors as compared to the pituitary gland. .

Protein Name

Vascular endothelial growth factor A(VEGF-A)

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Immunogen

A synthetic peptide corresponding to a sequence at the N-terminus of human VEGF(33-48aa VDIFQEYPDEIEYIFK), identical to the related mouse and rat sequences.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Sequence Similarities

Belongs to the PDGF/VEGF growth factor family.

Anti-VEGF 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: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

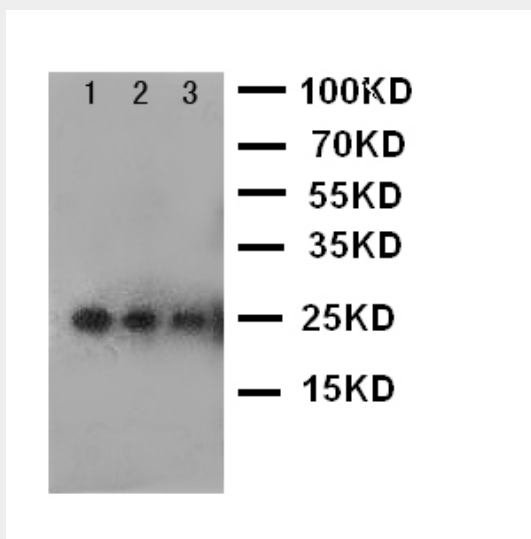
Higher expression in pituitary tumors than the pituitary gland. [Isoform VEGF165]: Widely expressed. [Isoform VEGF206]: Not widely expressed.

Anti-VEGF Antibody - Protocols

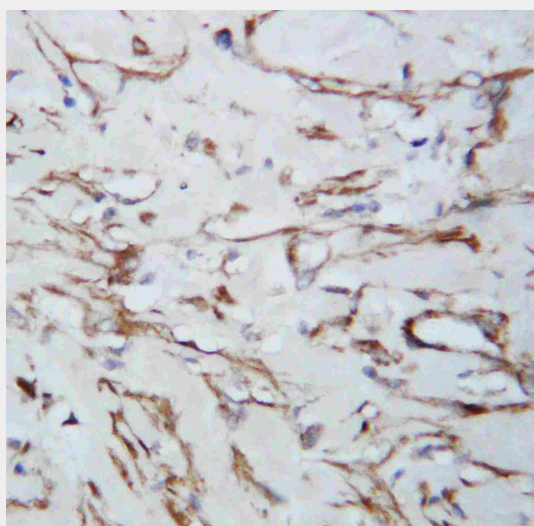
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-VEGF Antibody - Images



Anti-VEGF antibody, ABO10563, Western blotting
Lane 1: Recombinant Human VEGF Protein 10ng
Lane 2: Recombinant Human VEGF Protein 5ng
Lane 3: Recombinant Human VEGF Protein 2.5ng



Anti-VEGF antibody, ABO10563, IHC(P) IHC(P): Human Lung Cancer Tissue

Anti-VEGF Antibody - Background

VEGF, a homodimeric glycoprotein of relative molecular mass 45,000, is the only mitogen that specifically acts on endothelial cells. It may be a major regulator of tumor angiogenesis in vivo. Vascular endothelial growth factor is a mitogen primarily for vascular endothelial cells. It is, however, structurally related to platelet-derived growth factor. VEGF shares homology with the PDGF A chain and B chain, including conservation of all 8 cysteines found in PDGFA and PDGFB. VEGF gene contains 8 exons. Vascular endothelial growth factor(VEGF) induces remodeling and enhances TH2-mediated sensitization and inflammation in the lung. VEGF regulates haematopoietic stem cell survival by an internal autocrine loop mechanism. Vascular endothelial growth factor(VEGF) stimulates neurogenesis in vitro and in vivo.