

Anti-VEGF Antibody
Catalog # ABO10563

Specification

Anti-VEGF Antibody - Product Information

Application	WB, IHC
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](http://www.uniprot.org/citations/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

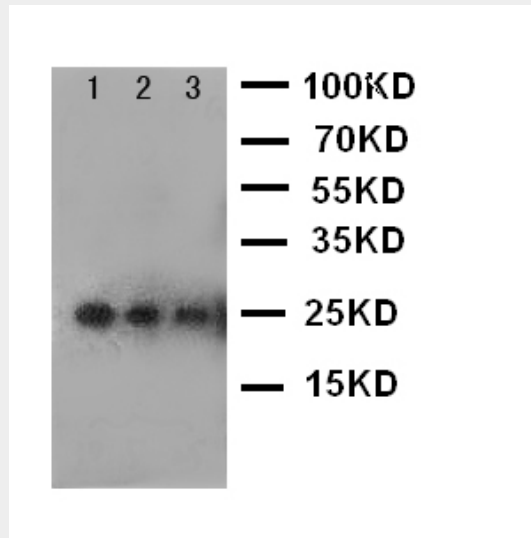
Higher expression in pituitary tumors than the pituitary gland. [Isoform VEGF165]: Widely expressed. [Isoform VEGF206]: Not widely expressed.

Anti-VEGF Antibody - Protocols

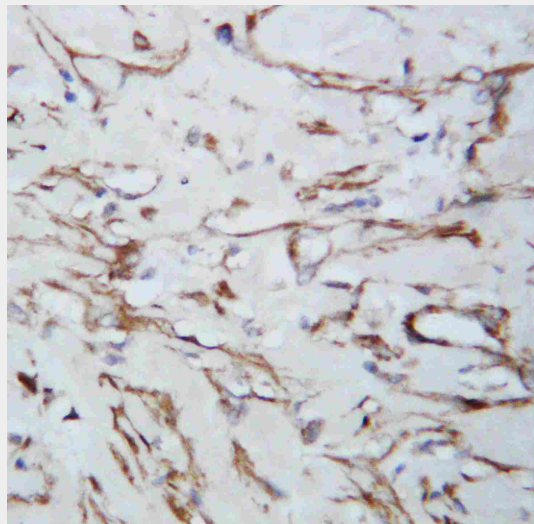
Provided below are standard protocols that you may find useful for product applications.

- [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.