

Anti-VEGF Picoband Antibody

Catalog # ABO11787

### Specification

## **Anti-VEGF Picoband Antibody - Product Information**

Application	WB, IHC-P
Primary Accession	<u>P15692</u>
Host	Rabbit
Reactivity	Human, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	
Rabbit IgG polyclonal antibody for Vas	cular endothelial growth fac

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

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

## **Anti-VEGF Picoband 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, Human, By Heat<br>Western blot, 0.1-0.5 μg/ml, Rat, Human<br>

### **Subcellular Localization**

Secreted . VEGF121 is acidic and freely secreted. VEGF165 is more basic, has heparin-binding properties and, although a signicant 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

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



Immunogen

E.coli-derived human VEGF recombinant protein (Position: A27-R191). Human VEGF shares 78% amino acid (aa) sequence identity with both mouse and rat VEGF.

**Purification** Immunogen affinity purified.

**Cross Reactivity** No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, 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 Picoband 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.

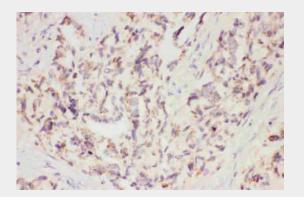
### **Anti-VEGF Picoband Antibody - Protocols**

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

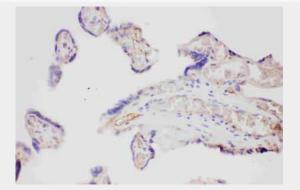
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

#### **Anti-VEGF Picoband Antibody - Images**

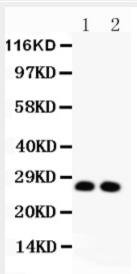




Anti-VEGF Picoband antibody, ABO11787-1.JPGIHC(P): Human Lung Cancer Tissue



Anti-VEGF Picoband antibody, ABO11787-2.JPGIHC(P): Human Placenta Tissue



Anti-VEGF Picoband antibody, ABO11787-3.jpgAll lanes: Anti-VEGF(ABO11787) at 0.5ug/mlLane 1: Rat Thymus Tissue Lysate at 40ugLane 2: Rat Brain Tissue Lysate at 40ugPredicted bind size: 27KDObserved bind size: 27KD

# Anti-VEGF Picoband 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. 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. VEGF induces remodeling and enhances TH2-mediated sensitization



and inflammation in the lung. And this gene also can regulate haematopoietic stem cell survival by an internal autocrine loop mechanism. Whatâ€<sup>™</sup>s more, it also stimulates neurogenesis in vitro and in vivo.