



Rabbit Anti-VEGF-A antibody

SL23255R

Product Name:	VEGF-A
Chinese Name:	血管内皮生长因子A抗体
Alias:	Vascuoar endothelial growth factor A; VEGF A; vascular endothelial growth factor A isoform 2 precursor; Vegf; VEGFA; MGC70609; MVCD1; VEGF; VPF; VEGFA_HUMAN; Vascular endothelial growth factor A; VEGF-A; Vascular permeability factor; VPF; VEGF A Precursor.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Rat,Dog,Pig,Horse,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	24kDa
Cellular localization:	Secretory protein
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human VEGF-A:1-100/232
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	This gene is a member of the PDGF/VEGF growth factor family and encodes a protein that is often found as a disulfide linked homodimer. This protein is a glycosylated mitogen that specifically acts on endothelial cells and has various effects, including mediating increased vascular permeability, inducing angiogenesis, vasculogenesis and

endothelial cell growth, promoting cell migration, and inhibiting apoptosis. Elevated levels of this protein is linked to POEMS syndrome, also known as Crow-Fukase syndrome. Mutations in this gene have been associated with proliferative and nonproliferative diabetic retinopathy. Alternatively spliced transcript variants, encoding either freely secreted or cell-associated isoforms, have been characterized. There is also evidence for the use of non-AUG (CUG) translation initiation sites upstream of, and in-frame with the first AUG, leading to additional isoforms.

Function:

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.

Subunit:

Homodimer; disulfide-linked. Also found as heterodimer with PGF (By similarity).

Subcellular Location:

Secreted. Note=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.

DISEASE:

Defects in VEGFA are a cause of susceptibility to microvascular complications of diabetes type 1 (MVCD1) [MIM:603933]. These are pathological conditions that develop in numerous tissues and organs as a consequence of diabetes mellitus. They include diabetic retinopathy, diabetic nephropathy leading to end-stage renal disease, and diabetic neuropathy. Diabetic retinopathy remains the major cause of new-onset blindness among diabetic adults. It is characterized by vascular permeability and increased tissue ischemia and angiogenesis.

Similarity:

Belongs to the PDGF/VEGF growth factor family.

SWISS:

P15692

Gene ID:
7422

Database links:

[Entrez Gene: 7422](#)Human

[Entrez Gene: 22339](#)Mouse

[Omin: 192240](#)Human

[SwissProt: P15692](#)Human

[SwissProt: Q00731](#)Mouse

[Unigene: 73793](#)Human

[Unigene: 282184](#)Mouse

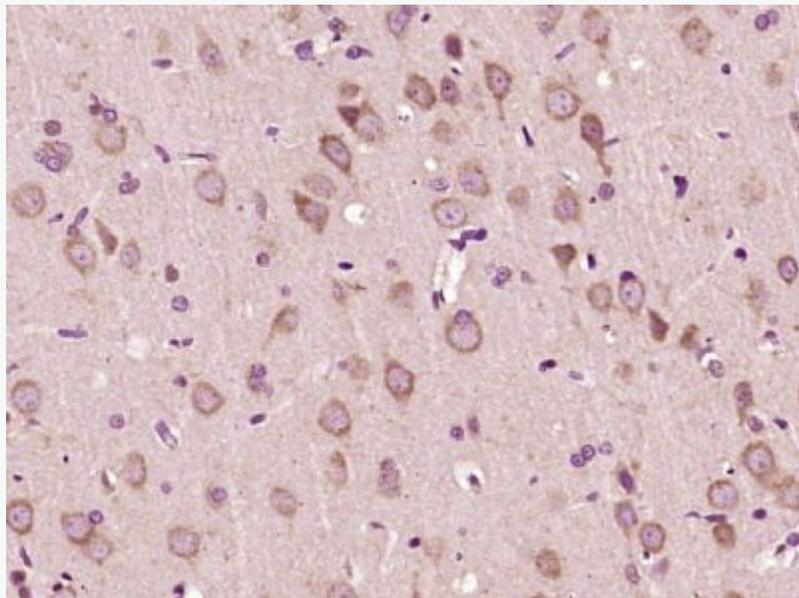
Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

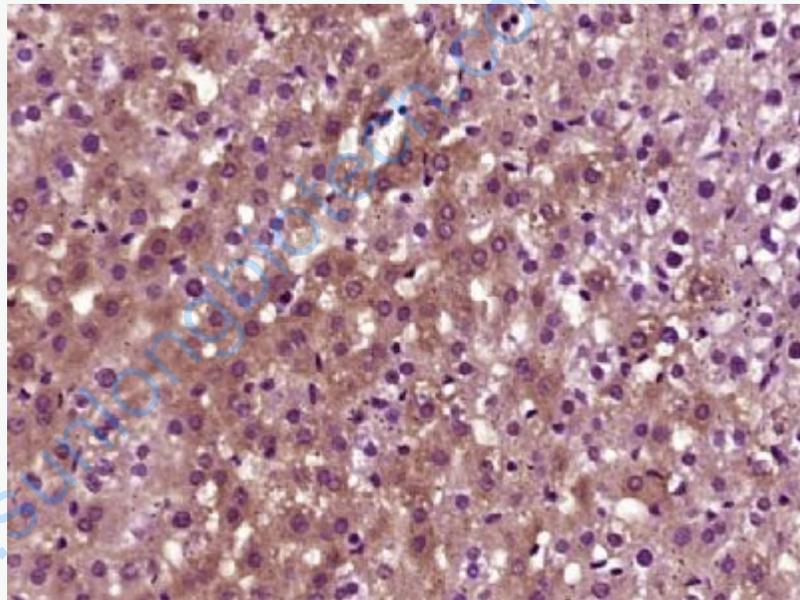
Growth factors and hormones (Growth Factor and Hormones) vascular endothelial cell 生长因子 (VEGF) 是一种特异作用于 vascular endothelial cell 的多功能 cell factor, 它能引起血管通透性增加, 引起 Extracellular matrix 成分改变, 诱导血管形成. 在炎症、创伤愈合、心脏缺血、动脉粥样硬化、Diabetes 性视网膜病变及 Tumour 形成等与血管生成和病变有关的诸多病理过程中起重要作用.

VEGF 与血管生成有关, 从而也与 Tumour 生长也有很大关系, 近年来受到很多关注.

Picture:



Paraformaldehyde-fixed, paraffin embedded (rat brain tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (VEGF-A) Polyclonal Antibody, Unconjugated (SL23255R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (rat liver tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (VEGF-A) Polyclonal Antibody, Unconjugated (SL23255R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.