

Rabbit Anti-VEGFA antibody

SL0279R

Product Name	VEGFA
Chinese Name	血管内皮生长因子抗体
Alias	Vasculoar endothelial growth factor A; VEGF A; vascular endothelial growth factor A isoform 2 precursor; MGC70609; MVCD1; VEGF; VPF; VEGFA_HUMAN; VEGF-A; Vascular permeability factor (VPF);
Research Area	Tumour Cardiovascular Growth factors and hormones Diabetes
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Mouse,Rat
Applications	WB=1:500-1000 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Theoretical molecular weight	24kDa
Cellular localization	Secretory protein
Form	Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human VEGF: 27-120/232
Lsotype	IgG
Purification	affinity purified by Protein A
Buffer Solution	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.
Storage	Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Attention	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
PubMed	PubMed
Product Detail	This gene product is a member of the PDGF/VEGF growth factor family. It is a mitogen that specifically acts on endothelial cells and has various effects,

including mediating increased vascular permeability, inducing angiogenesis, vasculogenesis, endothelial cell growth, promoting cell migration, and inhibiting apoptosis. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. Also, alternative translation initiation from non-AUG (CUG) and AUG start sites in some transcript variants, give rise to additional isoforms. [provided by RefSeq].

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.

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

[Entrez Gene: 83785](#) Rat

[Omim: 192240](#) Human

[SwissProt: P15692](#) Human

[SwissProt: Q00731](#) Mouse

[SwissProt: P16612](#) Rat

[Unigene: 73793](#) Human

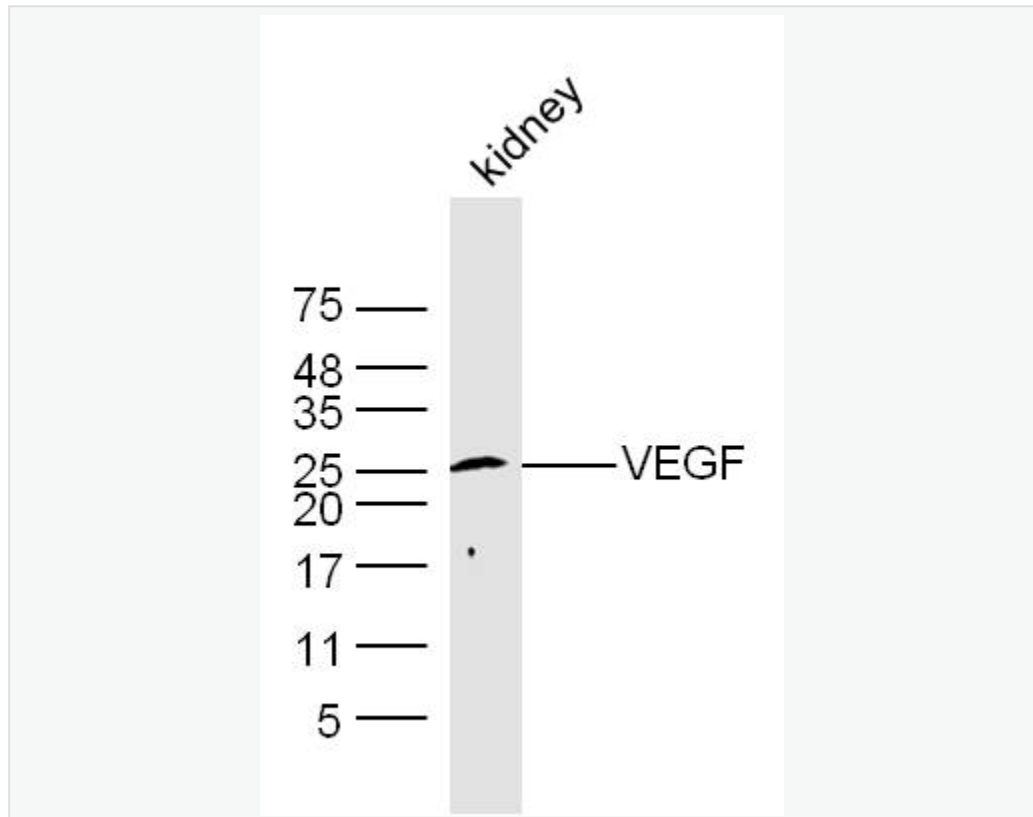
[Unigene: 282184](#) Mouse

[Unigene: 1923](#) Rat

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.

**Product
Picture**



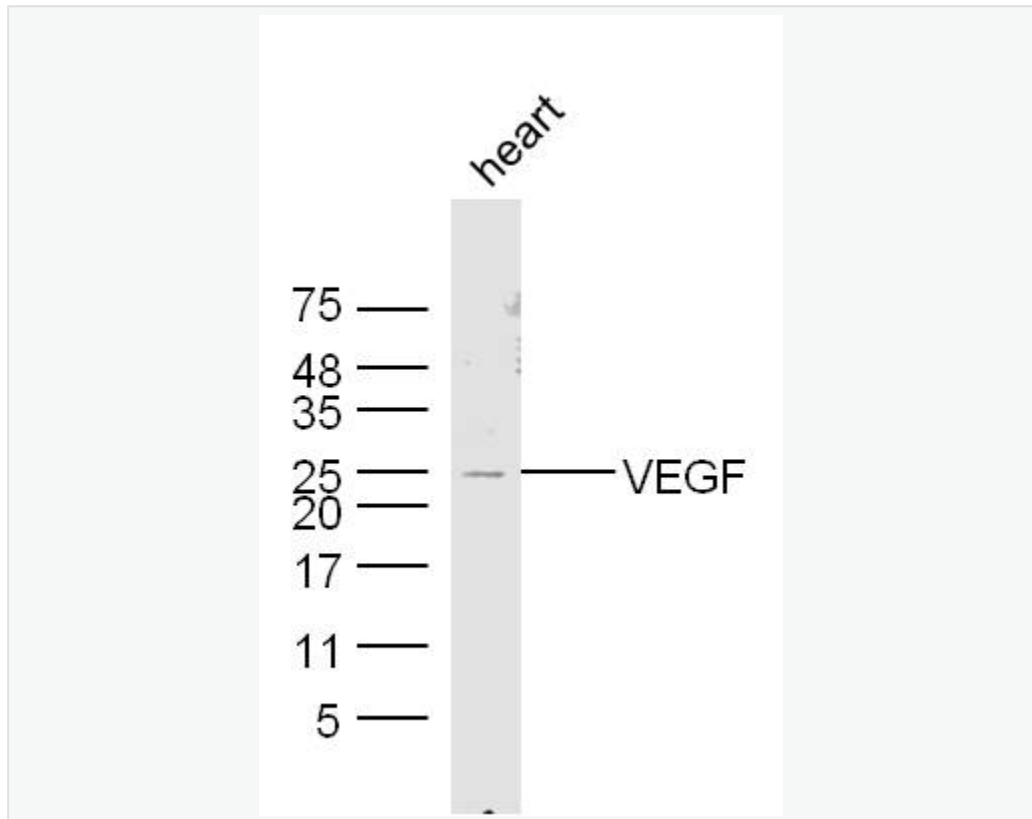
Sample: Kidney(Mouse) Lysate at 30 ug

Primary: Anti-VEGF (SL0279R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Mouse IgG at 1/20000 dilution

Predicted band size: 24 kD

Observed band size: 25 kD



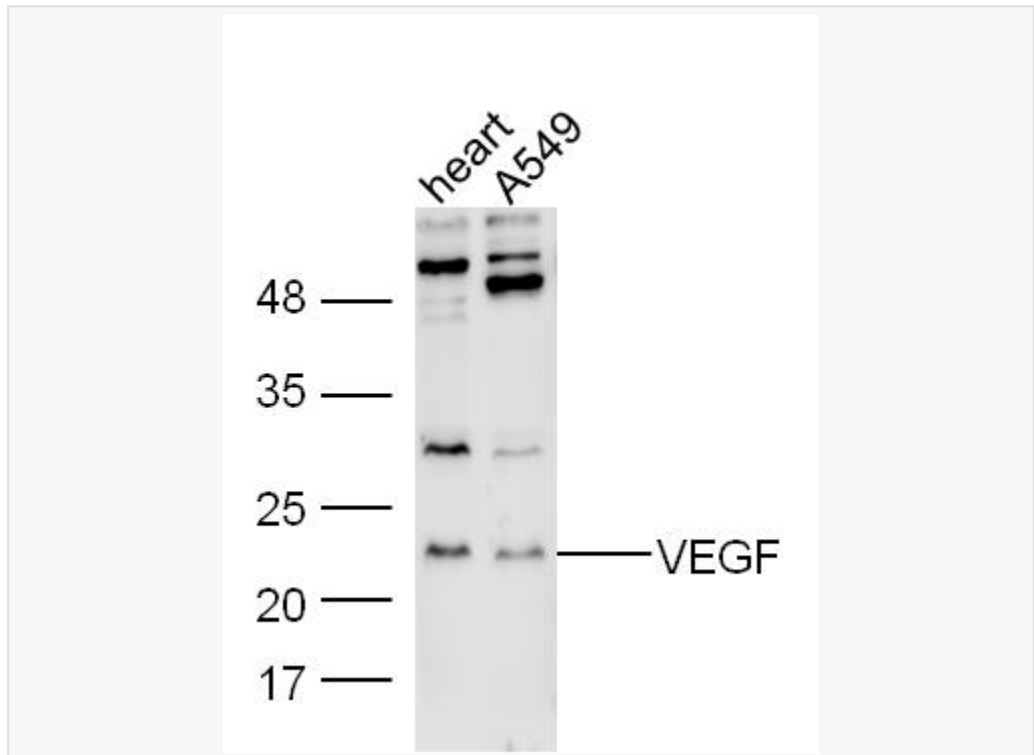
Sample: Heart(Mouse) Lysate at 30 ug

Primary: Anti-VEGF (SL0279R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Mouse IgG at 1/20000 dilution

Predicted band size: 24 kD

Observed band size: 25 kD



Sample:

heart (Mouse) Lysate at 40 ug

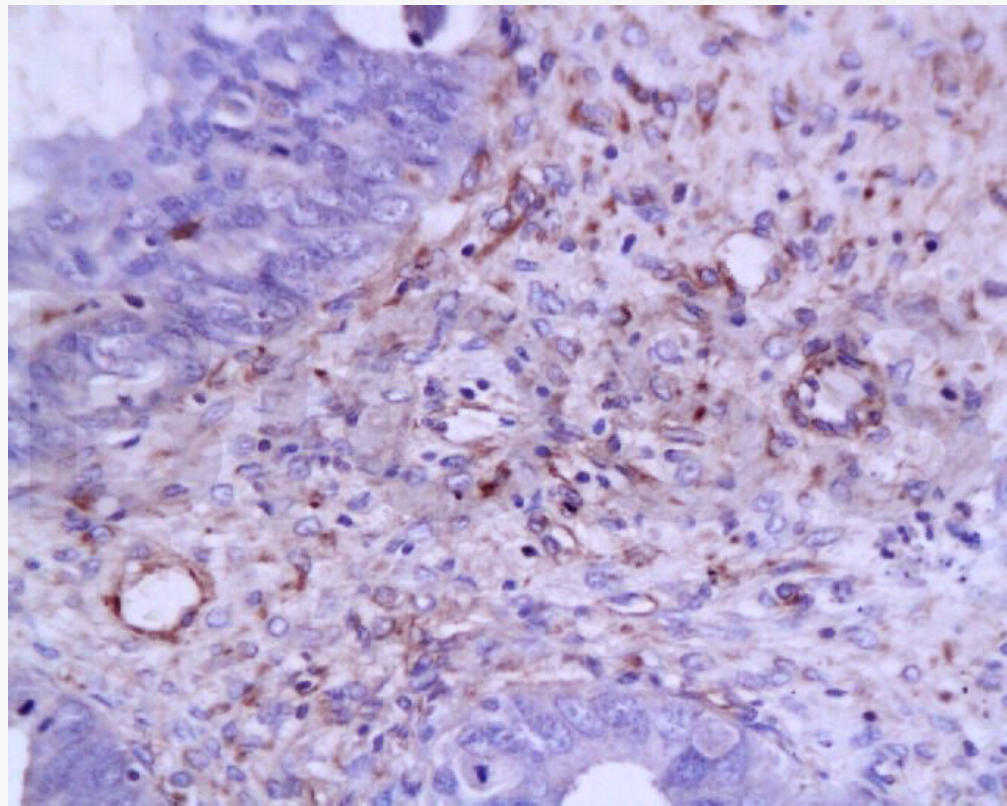
A549 Cell (Human) Lysate at 30 ug

Primary: Anti- VEGF (SL0279R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 24 kD

Observed band size: 24 kD



Tissue/cell: human ovary carcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded;

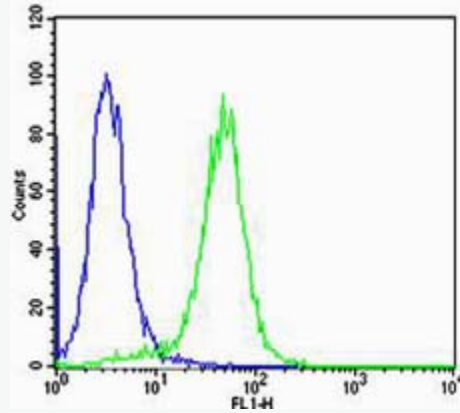
Antigen retrieval: citrate buffer (1M, pH 6.0), Boiling bathing for 15min;

Block endogenous peroxidase by 3% Hydrogen peroxide for 30min;

Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-VEGF Polyclonal Antibody, Unconjugated(SL0279R)

1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Cell: HeLa

Concentration:1:100

Host/Isotype:Rabbit/IgG

Flow cytometric analysis of Rabbit antibody (Cat#: SL0279R) on

HeLa(green) compared with isotype control in the absence of primary

antibody (blue) followed by Alexa Fluor 488-conjugated goat anti-rabbit

IgG(H+L) secondary antibody .