

# Rabbit Anti-VEGF antibody

SL0279R

Product Name:	VEGF
Chinese Name:	
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.
	Specific References(7) SL0279R has been referenced in 7 publications.
	[IF=3.89]Ryzhov, Sergey, et al. "Role of a2b adenosine receptors in regulation of
	paracrine functions of stem cell antigen 1-positive cardiac stromal cells." Journal of
	Pharmacology and Experimental Therapeutics 341.3 (2012): 764-774. Mouse.
	PubMed:22431204
	[IF=2.59]Zeng, KW., et al., Sprengerinin C exerts anti-tumorigenic effects in
	hepatocellular carcinoma via inhibition of proliferation and angiogenesis and induction
文献引用	of apoptosis. Eur J Pharmacol (2013)Mouse.
Pub	PubMed:23684542
:	[IF=3.17]Li, Junqin, et al. "Fatty Acid Synthase Mediates the Epithelial-Mesenchymal
	Transition of Breast Cancer Cells." International Journal of Biological Sciences 10.2
	(2014): 171-180. <b>WB;Human</b> .
	<u>PubMed:24520215</u>
	[IF=0.78]Zhang, Q. L., et al. "Expression and localization of the vascular endothelial
	growth factor and changes of microvessel density during hair follicle development of
	liaoning cashmere goats." Genet Mol Res 12.12 (2013): 6424-6432.IHC-P;Goat.
	PubMed:24390991

	<b>[IF=3.41</b> ]Qi, Yuanyuan, et al. "Inhaled NO contributes to lung repair in piglets with
	acute respiratory distress syndrome via increasing circulating endothelial progenitor
	cells." PloS one 7.3 (2012): e33859. <b>WB;Pig</b> .
	PubMed:22448277
	[IF=3.14]Varghese, Sheeja, et al. "The inhibitory effect of anti-tumor polysaccharide
	from Punica granatum on metastasis." International Journal of Biological
	Macromolecules (2017).WB;Human.
	PubMed:28552725
	[IF=1.00]Guo, Jian-wen, et al. "Combinatorial effects of Naomai Yihao Capsules () and
	vascular endothelial growth factor gene-transfected bone marrow mesenchymal stem
	cells on angiogenesis in cerebral ischemic tissues in rats." Journal of Traditional Chinese
	Medicine 32.1 (2012): 87-92.IHC-P;Rat.
	PubMed:22594109
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-
	Cyt=1µg/TestIF=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:27-120/232
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 Durier.	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized
Storage:	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 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 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.

## **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: 7422Human



Entrez Gene: 83785Rat

Omim: 192240Human

SwissProt: P15692Human

SwissProt: Q00731Mouse

SwissProt: P16612Rat

Unigene: 73793Human

Unigene: 282184Mouse

Unigene: 1923Rat

**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、Diabet es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.

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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.









