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Rabbit Anti-VEGF/AF350 Conjugated antibody

SL1313R-AF350

Product Name	Anti-VEGF/AF350
Chinese Name	AF350 标记的血管内皮生长因子抗体
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.
Research Area	Tumour Signal transduction Growth factors and hormones vascular endothelial cell
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Human,Mouse,Rat,Rabbit(predicted:Chicken,Dog,Pig,Cow)
Applications	IF=1:100-500 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight	23kDa
Form	Lyophilized or Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human VEGF
Lsotype	IgG
Purification	affinity purified by Protein A
Storage Buffer	1M TBS(pH7.4) with 1% BSA, 3% 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 1M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
Product Detail	**background:** 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.

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.

Database links:

Entrez Gene: 403802 Dog

Entrez Gene: 7422 Human

Entrez Gene: 22339 Mouse

Entrez Gene: 83785 Rat

Omim: 192240 Human

SwissProt: Q9MYV3 Dog

SwissProt: P15692 Human

SwissProt: Q00731 Mouse

SwissProt: P16612 Rat

Unigene: 73793 Human

Unigene: 282184 Mouse

Unigene: 1923 Rat

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

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，因而与 Tumour 生长有很大关系，近年来受到很多关注。