

# Rabbit Anti-VEGFR3 antibody

SL2202R

Product Name:	VEGFR3
Chinese Name:	vascular endothelial cell生长因子受体3抗体
Alias:	Vascular endothelial growth factor receptor 3; VEGF Receptor 3; Tyrosine-protein kinase; Flt4; VEGFR3; AI323512; Chy; FLT4; FLT41; LMPH1A; LOC285682; PCL; VEGFR-3; fms-related tyrosine kinase 4; VGFR3_MOUSE.
	<b>Specific References(3)</b>  SL2202R has been referenced in 3 publications.
	[IF=7.84]Zhuo, Wei, et al. "The CXCL12?CCXCR4 Chemokine Pathway: A Novel
	Axis Regulates Lymphangiogenesis."Clinical Cancer Research 18.19 (2012): 5387-
	5398.1Human, Mouse.
	PubMed:22932666
文献引用	[IF=2.02] Wang, Zheng, et al. "RhGH attenuates ischemia injury of intrahepatic bile
Publiced :	ducts relating to liver transplantation." Journal of Surgical Research 171.1 (2011): 300-
	310.IHC-P;Rat.
	PubMed:20462597
	[IF=5.99] Wang, Zhixiong, et al. "CXCL1 from tumor-associated lymphatic endothelial
	cells drives gastric cancer cell into lymphatic system via activating integrin
	β1/FAK/AKT signaling." Cancer Letters 385 (2017): 28-38.IF(ICC);Human.
	PubMed:27832972
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat,
	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=1µg
Applications:	/testICC=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:	151kDa
<b>Cellular localization:</b>	The nucleuscytoplasmicThe cell membraneSecretory protein
Form:	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from mouse VEGFR-3:901- 1000/1298 <cytoplasmic></cytoplasmic>
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:	<ul> <li>Vascular endothelial growth factors (VEGFs) are a family of closely related growth factors having a conserved pattern of eight cysteine esidues and sharing common VEGF receptors. VEGFs stimulate the proliferation of endothelial cells, induce angiogenesis, and increase vascular permeability in both large and small vessels. The mitogenic activity of VEGFs appears to be mediated by specific VEGF receptors. VEGF Receptor 3 is one of the five receptor tyrosine kinases (RTKs) (VEGF Receptor 1/Flt1, VEGF Receptor 2/KDR/Flk1, VEGF Receptor 3/Flt4, tie1 and tek/tie2) whose expression is almost exclusively restricted to endothelial cells</li> <li>Function:</li> <li>Tyrosine-protein kinase that acts as a cell-surface receptor for VEGFC and VEGFD, and plays an essential role in adult lymphangiogenesis and in the development of the vascular network and the cardiovascular system during embryonic development.</li> <li>Promotes proliferation, survival and migration of endothelial cells, and regulates angiogenic sprouting. Signaling by activated FLT4 leads to enhanced production of VEGFC, and to a lesser degree VEGFA, thereby creating a positive feedback loop that enhances FLT4 signaling. Modulates KDR signaling pathway, of MAPK8 and the JUN signaling pathway, and of the AKT1 signaling pathway. Phosphorylates SHC1.</li> <li>Mediates phosphorylation of PIK3R1, the regulatory subunit of phosphatidylinositol 3-kinase. Promotes phosphorylation of MAPK8 at 'Thr-183' and 'Tyr-185', and of AKT1 at 'Ser-473'.</li> <li>Subunit:</li> <li>Interacts with VEGFC and VEGFD. Monomer in the absence of bound VEGFC or VEGFD. Homodimer in the presence of bound VEGFC or VEGFD. Can also form a heterodimer with KDR. Interacts with CRK, GRB2, PTK2/FAK1, SHC1, PIK3R1 and PTPN11/SHP-2. Identified in a complex with SRC and ITGB1.</li> <li>Subcellular Location:</li> </ul>

Cell membrane; Single-pass type I membrane protein. Cytoplasm. Nucleus. Note=Ligand-mediated autophosphorylation leads to rapid internalization. Isoform 1: Cell membrane; Single-pass type I membrane protein. Note=Ligandmediated autophosphorylation leads to rapid internalization. Isoform 2: Cell membrane; Single-pass type I membrane protein. Isoform 3: Secreted. Cytoplasm.

## Tissue Specificity:

Detected in endothelial cells (at protein level). Widely expressed. Detected in fetal spleen, lung and brain. Detected in adult liver, muscle, thymus, placenta, lung, testis, ovary, prostate, heart, and kidney.

## **Post-translational modifications:**

Autophosphorylated on tyrosine residues upon ligand binding. Autophosphorylation occurs in trans, i.e. one subunit of the dimeric receptor phosphorylates tyrosine residues on the other subunit. Phosphorylation in response to H(2)O(2) is mediated by a process that requires SRC and PRKCD activity. Phosphorylation at Tyr-1068 is required for autophosphorylation at additional tyrosine residues. Phosphorylation at Tyr-1063 and Tyr-1337 is important for interaction with CRK and subsequent activation of MAPK8. Phosphorylation at Tyr-1230, Tyr-1231 and Tyr-1337 is important for interaction with GRB2 and subsequent activation of the AKT1 and MAPK1/ERK2 and/or MAPK3/ERK1 signaling pathways. In response to endothelial cell adhesion onto collagen, can also be phosphorylated in the absence of FLT4 kinase activity by SRC.

#### Similarity:

Belongs to the protein kinase superfamily. Tyr protein kinase family. CSF-1/PDGF receptor subfamily.

Contains 7 Ig-like C2-type (immunoglobulin-like) domains. Contains 1 protein kinase domain.

SWISS: P35916

Gene ID: 2324

#### Database links:

Entrez Gene: 2324Human

Entrez Gene: 14257 Mouse

Entrez Gene: 114110Rat

Omim: 136352Human

SwissProt: P35916Human

	SwissProt: P35917Mouse
	SwissProt: Q91ZT1Rat
	Unigene: 646917Human
	Unigene: 3291Mouse
	Unigene: 81043Rat
	<b>Important Note:</b> This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
	VEGFR3又称FLt4主要在成熟组织的淋巴管endothelial cells上表达, VEGF-
	R3与淋巴管endothelial
	cells增殖和迁移有关,有刺激淋巴管新生的作用,目前多用于Tumour转移方面的研究。
Picture:	
	Tissue/cell: human gastric carcinoma;4% Paraformaldehyde-fixed and paraffin-
	embedded
	Antigen retrieval: citrate buffer ( 0.01M, pH 6.0 ), Boiling bathing for 15min; Block
	endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer
	(normal goat serum) at 37°C for 20 min





