

Immunotag™ VEGF-A Polyclonal Antibody

Antibody Specification	
Catalog No.	ITT4870
Product Description	Immunotag™ VEGF-A Polyclonal Antibody
Size	50 µg, 100 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	VEGF-A
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,IF,IHC-p,ELISA
Recommended Dilution	IF: 1:50-200 Immunohistochemistry: 1/100 - 1/300. ELISA: 1/10000. Not yet tested in other applications.
Concentration	1 mg/ml
Reactive Species	Human,Mouse,Rat
Host Species	Rabbit
Immunogen	Synthesized peptide derived from the Internal region of human VEGF-A
Specificity	VEGF-A Polyclonal Antibody detects endogenous levels of VEGF-A protein.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen
Form	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Gene Name	VEGFA
Accession No.	P15692 Q00731 P16612
Alternate Names	VEGFA; VEGF; Vascular endothelial growth factor A; VEGF-A; Vascular permeability factor; VPF

Antibody Specification

Description	vascular endothelial growth factor A(VEGFA) Homo sapiens This gene is a member of the PDGF/VEGF growth factor family. It encodes a heparin-binding protein, which exists as a disulfide-linked homodimer. This growth factor induces proliferation and migration of vascular endothelial cells, and is essential for both physiological and pathological angiogenesis. Disruption of this gene in mice resulted in abnormal embryonic blood vessel formation. This gene is upregulated in many known tumors and its expression is correlated with tumor stage and progression. Elevated levels of this protein are found in patients with POEMS syndrome, also known as Crow-Fukase syndrome. Allelic variants of this gene have been associated with microvascular complications of diabetes 1 (MVCD1) and atherosclerosis. Alternatively spliced transcript variants encoding different isoforms have been described. There is also evidence for alternative translation initiation fro
Cell Pathway/ Category	Cytokine-cytokine receptor interaction,mTOR,VEGF,Focal adhesion,Pathways in cancer,Renal cell carcinoma,Pancreatic cancer,Bladder cancer,
Protein Expression	Brain,Epithelium,Heart,Hemangioendothelioma,Kidney,Lung,Mammary gla
Subcellular Localization	extracellular region,proteinaceous extracellular matrix,extracellular space,cytoplasm,cell surface,membrane,secretory granule,platelet alpha granule lumen,
Protein Function	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 VEGFR1/Flt-1 and VEGFR2/Kdr receptors, heparan sulfate and heparin. Neuropilin-1 binds isoforms VEGF-165 and VEGF-145. Isoform VEGF165B binds to VEGFR2/Kdr but doesn't activate downstream signaling pathways, doesn't activate angiogenesis and inhibits tumor growth.,induction:Regulated by growth factors, cytokines, gonadotropins, nitric oxide, hypoxia, hypoglycemia and oncogenic mutations.,online information:VEGF entry,similarity:Belongs to the PDGF/VEGF growth factor family.,subcellular location: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.,subunit:Homodimer; disulfide-linked. Also found as heterodimer with PlGF.,tissue specificity:The VEGF189, VEGF-165 and VEGF-121 isoforms are widely expressed, whereas the VEGF206 and VEGF-145 are uncommon.,
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