Datasheet for ABIN964762

anti-VEGF antibody

1 Image

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Overview

Quantity:	100 µg
Target:	VEGF
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This VEGF antibody is un-conjugated
Application:	Western Blotting (WB), ELISA

Product Details

Immunogen:	This IgG fraction antibody was prepared from rabbit antiserum after repeated immunizations with mature length recombinant human VEGFA-121 protein produced in E.coli. Immunogen Type: RecombinantProtein
Isotype:	IgG
Specificity:	This product is an IgG fraction antibody purified from monospecific antiserum by a multi-step process which includes delipidation, salt fractionation and ion exchange chromatography followed by extensive dialysis against the buffer stated above. This antibody is specific for human VEGFA-121 protein. A BLAST analysis was used to suggest cross-reactivity with VEGFA-121 from human sources based on 100% homology with the immunizing sequence. Based on high to 100% homology, there is a chance of cross-reactivity to VEGFA-121 from a wide variety of animals. Cross-reactivity with VEGFA-121 from other sources has not been determined.
Characteristics:	Vascular endothelial growth factor-A was originally isolated from tumor cells and referred to as Tumor Angiogenesis Factor. Although expressed at high levels in certain tumor-derived cells it

Product Details

	is produced by a wide variety of cell types. In addition to stimulating vascular growth, vascular permeability, cell migration, and endothelial cell proliferation and growth, it may play a role in stimulating vasolidation via nitric oxide-dependent pathways and in inhibition of apoptosis. VEGF binds to the FLT1/VEGFR1 and KDR/VEGFR2 receptors, heparan sulfate and heparin. Alternative splicing of the mRNA for VEGF-A results in several isoforms of the protein being produced. Rat and bovine VEGF are one amino acid shorter than the human factor, and the bovine and human sequences show a homology of 95 percent. In contrast to other factors mitogenic for endothelial cells such as FGF-1, FGF-2 and PDGF, VEGF is synthesized as a precursor containing a typical hydrophobic secretory signal sequence of 26 amino acids. Glycosylation is not required for efficient secretion of VEGF. VEGF121 is acidic, freely secreted, and widely expressed. This isoform is produced by alternative promoter usage and alternative initiation. It starts at an alternative upstream CUG codon and is post-translationally processed to produce the secreted VEGF peptide and a N-terminal peptide N-VEGF. The unprocessed protein and the N-VEGF peptide may localize to the nucleus, the endoplasmic reticulum and the Golgi or the extracellular matrix.
Purification:	purified

Target Details

Target:	VEGF
Alternative Name:	VEGF (VEGF Products)
Background:	Vascular endothelial growth factor-A was originally isolated from tumor cells and referred to as Tumor Angiogenesis Factor. Although expressed at high levels in certain tumor-derived cells it is produced by a wide variety of cell types. In addition to stimulating vascular growth, vascular permeability, cell migration, and endothelial cell proliferation and growth, it may play a role in stimulating vasolidation via nitric oxide-dependent pathways and in inhibition of apoptosis. VEGF binds to the FLT1/VEGFR1 and KDR/VEGFR2 receptors, heparan sulfate and heparin. Alternative splicing of the mRNA for VEGF-A results in several isoforms of the protein being produced. Rat and bovine VEGF are one amino acid shorter than the human factor, and the bovine and human sequences show a homology of 95 percent. In contrast to other factors mitogenic for endothelial cells such as FGF-1, FGF-2 and PDGF, VEGF is synthesized as a precursor containing a typical hydrophobic secretory signal sequence of 26 amino acids. Glycosylation is not required for efficient secretion of VEGF. VEGF121 is acidic, freely secreted, and widely expressed. This isoform is produced by alternative promoter usage and alternative initiation. It starts at an alternative upstream CUG codon and is post-translationally processed

Target Details

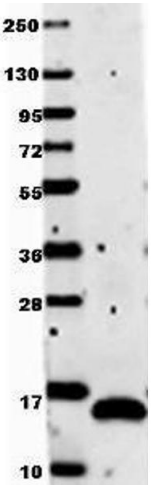
	to produce the secreted VEGF peptide and a N-terminal peptide N-VEGF. The unprocessed protein and the N-VEGF peptide may localize to the nucleus, the endoplasmic reticulum and the Golgi or the extracellular matrix. Synonyms: Vascular endothelial growth factor A-121, VEGF-A121 cytokine, Vascular permeability factor, VPF-121, VEGFA-121
Gene ID:	7422, 6631029

Application Details

Application Notes:	This purified antibody has been tested for use in ELISA and western blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 14.7 Da in size corresponding to the mature human VEGFA-121 protein by western blotting in appropriate cell lysate or extract.
Comment:	Gene Name: VEGFA
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Reconstitution Buffer: Restore with deionized water (or equivalent), Reconstitution Volume: 100 µL
Concentration:	1.0 mg/mL
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	Without preservative
Storage:	4 °C/-20 °C
Storage Comment:	Store vial at 4 °C prior to restoration. For extended storage aliquot contents and freeze at -20 °C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4 °C as an undiluted liquid. Dilute only prior to immediate use. Expiration date is six (6) months from date of opening.
Expiry Date:	6 months



Western Blotting

Image 1. Anti-human VEGF-121 by western blot shows detection of recombinant Human VEGF-121 raised in E.coli. Recombinant (0.1 µg, 28.4 kDa) protein was loaded onto and resolved by SDS-PAGE, then transferred to nitrocellulose. The membrane was blocked with 1% BSA in TBST for 30 min at RT, followed by incubation with , Inc. Anti-Human VEGF-121. After washing, membrane was probed with secondary antibody 649 Conjugated Anti-Rabbit IgG (H&L) (Goat) Antibody diluted 1:20,000 in blocking buffer for 30 min. at RT. Data was collected using Bio-Rad 4000 MP imaging system.