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Anti-Human VEGF-121 (RABBIT) Antibody

VEGF-121 Antibody
Catalog # ASR4938

Specification

Anti-Human VEGF-121 (RABBIT) Antibody - Product Information

Host	**Rabbit**
Conjugate	**Unconjugated**
Target Species	**Human**
Reactivity	**Human**
Clonality	**Polyclonal**
Application	**WB, E, I, LCI**
Application Note	**This purified antibody has been tested in western blotting and suitable for ELISA. 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.**
Physical State	**Lyophilized**
Buffer	**0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2**
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.**
Reconstitution Volume	**100 µL**
Reconstitution Buffer	**Restore with deionized water (or equivalent)**

Anti-Human VEGF-121 (RABBIT) Antibody - Additional Information

Other Names
7422

Purity
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.

Storage Condition
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.

Precautions Note
This product is for research use only and is not intended for therapeutic or diagnostic applications.

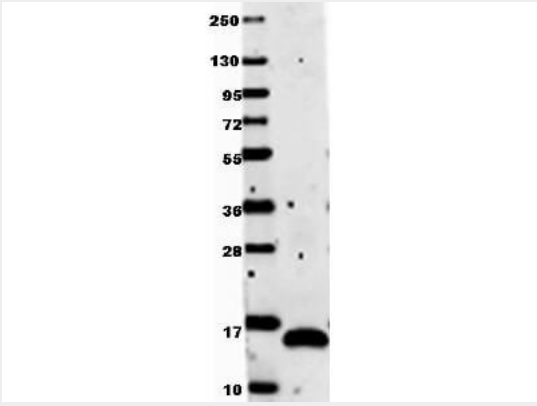
Anti-Human VEGF-121 (RABBIT) Antibody - Protein Information

Anti-Human VEGF-121 (RABBIT) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Human VEGF-121 (RABBIT) Antibody - Images



Anti-human VEGF-121 by western blot shows detection of recombinant Human VEGF-121 raised in E.coli. Recombinant (0.1 µg, 14.7 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 Rockland's, Inc. Anti-Human VEGF-121. After washing, membrane was probed with secondary antibody Dylight™ 649 Conjugated Anti-Rabbit IgG (H&L) (Goat) Antibody (611-143-122) diluted 1:20,000 in blocking buffer (p/n MB-070) for 30 min. at RT. Data was collected using Bio-Rad VersaDoc® 4000 MP imaging system.

Anti-Human VEGF-121 (RABBIT) Antibody - 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 vasodilation 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.