

Rabbit Anti-Human VEGF-B167

ORDERING INFORMATION

Catalog Number: 102-PA72 Size: 100 μg

Formulation: Polyclonal Antibody; Lyophilized

Synonyms: VEGFB; VRF; VEGFL

Antigen: Recombinant human VEGF-B167

Application: WB

Uniport: P49765

Buffer: PBS pH 7.4 w/o preservative

Description:

VEGF is a member of the VEGF family of growth factors that share structural and functional similarity. Five mammalian members, including VEGF-A, B, C, D and PIGF, have been identified. VEGF family members are disulfide-linked dimeric proteins that are important regulators of physiological and pathological vasculogenesis, angiogenesis and lymphangiogenesis. VEGF-B is expressed in most tissues, especially in heart, skeletal muscle and pancreas. In many tissues, VEGF-B is coexpressed and can heterodimerize with VEGF. By alternative splicing, two isoforms of mature VEGF-B containing 167 or 186 amino acid (aa) residues exist. The two VEGF-B isoforms have identical amino-terminal cysteine knot VEGF homology domains but the carboxyl end of VEGF-B167 differs from that of VEGF-B186 by the presence of a highly basic cysteine-rich heparin binding domain. Whereas VEGF-B186 is a secreted diffusible protein, VEGF-B167 is sequestered into the cell matrix after secretion. Both VEGF-B isoforms bind VEGF receptor 1 (VEGFR-1), but not VEGFR-2 or VEGFR-3. On endothelial cells, ligation of VEGFR-1 by VEGF-B has been shown to regulate the expression and activity of urokinase type plasminogen activator and plasminogen activator inhibitor 1. VEGF-B167 and a proteolytically processed form of VEGF-B186 (VEGF-B127) also bind neuropilin1 (NP1), a type I transmembrane receptor for semaphorins/collapsins, ligands involved in neuron guidance. Besides VEGF-B, NP1 has been shown to bind PIGF-2, VEGF165 and VEGFR-1. The many interactions of NP1 with VEGF ligands and receptor suggest that NP1 may function as a regulator of angiogenesis.

Reconstitution:

Centrifuge vial prior to opening. Reconstitute in sterile water to a concentration of 0.1-1.0 mg/ml. *Stability:*

The lyophilized antibody is stable at room temperature for up to 1 month. The reconstituted antibody is stable for at least two weeks at 2-8 °C. Frozen aliquots are stable for at least 6 months when stored at -20 °C. **Avoid repeated freeze-thaw cycles!**

Optimal dilutions should be determined by each laboratory for each application. The listed dilutions are for recommendation only and the final conditions should be optimized by the ender users!

This product is sold for Research Use Only!

Contact & Ordering Information: Angio-Proteomie, 11 Park Drive, Suite 12, Boston, MA 02215, USA. Tel: 617-549-2665; Fax: (480) 247-4337, angioproteomie@gmail.com