

#### **Recombinant Human VEGF-B**

Catalog # PBG10474

# **Specification**

# **Recombinant Human VEGF-B - Product Information**

#### **Recombinant Human VEGF-B - Additional Information**

# **Description**

VEGF-B, a member of the VEGF family, is a potent growth and angiogenic cytokine. It promotes DNA synthesis in endothelial cells, helps regulate angiogenesis and vascular permeability, and inhibits apoptosis in certain smooth muscle cells and neurons. VEGF-B is expressed in all tissues except the liver. It forms cell surfaced-associated disulfide linked homodimers and can form heterodimers with VEGF-A. There are two known isoforms, formed by alternative splicing, which have been designated VEGF-B167 and VEGF-B186. Both forms have identical amino-terminal sequences encoding a "cysteine knot" like structural motif, but differ in their carboxyl-terminal domains. Both VEGF-B isoforms signal only through the VEGFR1 receptor. Recombinant human VEGF-B is a 38.0 kDa disulfide-linked homodimeric protein consisting of two 167 amino acid polypeptide chains.

# **Biological**Activity

Determined by the dose-dependent stimulation of the proliferation of human umbilical vein endothelial cells (HUVEC) in the presence of human VEGF<sub>165</sub>. The expected <strong>ED</strong><sub>50</sub> for this effect is  $1.0-2.0 \mu g/ml$ .

#### **Authenticity**

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

### **Endotoxin**

Endotoxin level is  $<0.1 \text{ ng}/\mu\text{g}$  of protein ( $<1\text{EU}/\mu\text{g}$ ).

### **Protein Content**

Verified by UV Spectroscopy and/or SDS-PAGE gel.

# Storage

-20°C

#### **Precautions**

Recombinant Human VEGF-B is for research use only and not for use in diagnostic or therapeutic procedures.

# **Recombinant Human VEGF-B - Protocols**

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

- Western Blot
- Blocking Peptides
- Dot Blot





• <u>Immunohistochemistry</u>

- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

Recombinant Human VEGF-B - Images