

#### **VEGF-C**

Catalog # PVGS1496

# **Specification**

#### **VEGF-C - Product Information**

Primary Accession **Species** Human

P49767

# **Sequence**

Ala112-Arg227, expressed with an N-terminal Met

# **Purity**

> 95% as analyzed by SDS-PAGE

## **Endotoxin Level**

< 0.2 EU/  $\mu g$  of protein by gel clotting method

# **Biological Activity**

Measured in a cell proliferation assay using HMVEC human microvascular endothelial cells. The ED<sub>50</sub> for this effect is < 0.5  $\mu$ g/ml.

# **Expression System**

**HEK 293** 

Formulation

Lyophilized after extensive dialysis against PBS.

#### Reconstitution

It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH<sub>2</sub>O or PBS up to 100 µg/ml.

#### Storage & Stability

Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

# **VEGF-C - Additional Information**

#### **Gene ID 7424**

# **Other Names**

Vascular endothelial growth factor C, VEGF-C, Flt4 ligand, Flt4-L, Vascular endothelial growth factor-related protein, VRP, VEGFC

#### **Target Background**

Vascular endothelial growth factor C (VEGF-C) is a member of the platelet-derived growth factor/vascular endothelial growth factor (PDGF/VEGF) family, is active in angiogenesis, lymphangiogenesis and endothelial cell growth and survival, and can also affect the permeability



of blood vessels. VEGF-C is expressed in various tissues, however it is not produced in peripheral blood lymphocytes. It forms cell surface-associated non-covalent disulfide linked homodimers, and can bind and activate both VEGFR-2 (flk1) and VEGFR-3 (flt4) receptors. The structure and function of VEGF-C is similar to those of vascular endothelial growth factor D (VEGF-D).

#### **VEGF-C - Protein Information**

# **Name VEGFC**

#### **Function**

Growth factor active in angiogenesis, and endothelial cell growth, stimulating their proliferation and migration and also has effects on the permeability of blood vessels. May function in angiogenesis of the venous and lymphatic vascular systems during embryogenesis, and also in the maintenance of differentiated lymphatic endothelium in adults. Binds and activates KDR/VEGFR2 and FLT4/VEGFR3 receptors.

# **Cellular Location**

Secreted.

## **Tissue Location**

Expressed in the spleen (PubMed:8700872, PubMed:9247316). Expressed in the lymph node, thymus, appendix and bone marrow (PubMed:9247316). Expressed in the heart, placenta, skeletal muscle, ovary and small intestine (PubMed:8617204, PubMed:8700872) Expressed in the prostate, testis and colon (PubMed:8700872)

## **VEGF-C - 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

# **VEGF-C - Images**