

DATASHEET Version 20181206

VEGF-C, Human

Cat. No.: Z03286-1

Size: 1.0 mg

Synonyms: Flt4 ligand, VRP

Description:

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).

Recombinant human VEGF-C produced in HEK293 cells is a polypeptide chain containing 126 amino acids. A fully biologically active molecule, rhVEGF-C has a molecular mass of 16-19 kDa analyzed by reducing SDS-PAGE and is obtained by chromatographic techniques at GenScript.

Amino Acid Sequence:

00001 MAHYNTEILK SIDNEWRKTQ CMPREVCIDV GKEFGVATNT 00041 FFKPPCVSVY RCGGCCNSEG LQCMNTSTSY LSKTLFEITV 00081 PLSQGPKPVT ISFANHTSCR CMSKLDVYRQ VHSIIRR Source: HEK 293 Species: Human

Biological Activity: Measured in a cell proliferation assay using HMVEC human microvascular endothelial cells. The ED $_{50}$ for this effect is < 0.5 μ g/mL.

Molecular Weight: 16 19 kDa, observed by reducing

SDS-PAGE.

Formulation: Lyophilized after extensive dialysis

against PBS.

Reconstitution: Reconstituted in ddH₂O or PBS at

100 μg/ml.

Purity: > 95% as analyzed by SDS-PAGE.

Endotoxin Level: < 0.2 EU/µg, determined by LAL method.

Storage: Lyophilized recombinant Human Vascular Endothelial Growth Factor C remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, Human Vascular Endothelial Growth Factor C should be stable up to 1 week at 4°C or up to 3 months at -20°C.