

## Recombinant Human VEGF-C (C-6His)

Catalog No: C546

<b>Description</b>	Recombinant Human Vascular Endothelial Growth Factor C is produced by our Mammalian expression system and the target gene encoding Phe32-Arg227 is expressed with a 6His tag at the C-terminus.
<b>Expression System</b>	Human cells
<b>Alternative name</b>	Vascular Endothelial Growth Factor C; VEGF-C; Flt4 Ligand; Flt4-L; Vascular Endothelial Growth Factor-Related Protein; VRP; VEGFC
<b>Accession No.</b>	P49767
<b>Predicted Molecular Weight</b>	23.27kDa
<b>Apparent Molecular Weight</b>	25-30kDa, reducing conditions.
<b>Quality Control</b>	Purity: greater than 95% as determined by reducing SDS-PAGE. Endotoxin: less than 0.1 ng/μg (1 EU/μg) as determined by LAL test.
<b>Formulation</b>	Lyophilized from a 0.2 μm filtered solution of 50mM Glycine 50mM NaCl pH4.0.
<b>Reconstitution</b>	It is not recommended to reconstitute to a concentration less than 100μg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.
<b>Storage</b>	Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months. Always centrifuge tubes before opening. Do not mix by vortex or pipetting.
<b>Background</b>	Vascular Endothelial Growth Factor (VEGF)-C is a member of the VEGF family, a group of polypeptide growth factors which play key roles in the physiology and pathology of many aspects of the cardiovascular system, including vasculogenesis, hematopoiesis, angiogenesis and vascular permeability. While VEGFC is homologous to other members of the VEGF/PDGF family, it contains the C-terminal propeptide which has an unusual structure with tandemly repeated cysteine-rich motifs. Upon biosynthesis, VEGFC is secreted as a non-covalent momodimer in an anti-parallel fashion. VEGF signalling in endothelial cells occurs through three tyrosine kinase receptors (VEGFRs) expressed by endothelial cells and hematopoietic precursors, and VEGF-C is a ligand for two receptors, VEGFR-3 (Flt4), and VEGFR-2. It is indicated that VEGFC undergoes a complex proteolytic maturation generating a variety of processed secreted forms with increased activity toward VEGFR-3, but only the fully processed form could activate VEGFR-2. VEGFC may function in angiogenesis of the venous and lymphatic vascular systems during embryogenesis, and also in the maintenance of differentiated lymphatic endothelium in adults. Knockout of the VEGF-C gene is embryonic lethal late in development, and although cells differentiate into the lymphatic lineage, they fail to sprout and form lymphatic vessels. Inactivation of a single VEGF-C allele results in the development of cutaneous lymphatic hypoplasia and lymphedema.

**SDS-PAGE**

