

## VEGFC

### Recombinant Human VEGF-C, His-Tag

|                                 |   |                  |               |
|---------------------------------|---|------------------|---------------|
| <b>Catalog No.</b>              | CRV112A<br>CRV112B  | <b>Quantity:</b> | 5 µg<br>20 µg |
| <b>Alternate Names:</b>         | Vascular endothelial growth factor C, Flt4 ligand, FLT4-L   |                  |               |
| <b>Description:</b>             | VEGFC, also known as Vascular Endothelial Growth Factor Related Protein (VRP), is a recently discovered VEGF growth factor family member that is most closely related to VEGFD. The human VEGFC cDNA encodes a pre-pro-protein of 416 amino acids residues. It is almost identical to the mouse VEGFC protein. Similar to VEGFD, VEGFC has a VEGF homology domain spanning the middle third of the precursor molecule and long N- and C-terminal extensions. In adults, VEGFC is highly expressed in heart, placenta, ovary and small intestine. Recombinant human VEGFC, lacking the N- and C-terminal extensions and containing only the middle VEGF homology domain, forms primarily non-covalently linked dimers. This protein is a ligand for both VEGFR2/KDR and VEGFR3/FLT4. Since VEGFR3 is strongly expressed in lymphatic endothelial cells, it has been postulated that VEGFC is involved in the regulation of the growth and/or differentiation of lymphatic endothelium. Although recombinant human VEGFC is also a mitogen for vascular endothelial cells, it is much less potent than VEGFA. |                  |               |
| <b>UniProt ID:</b>              | P49767  |                  |               |
| <b>Gene ID:</b>                 | 7424  |                  |               |
| <b>Source:</b>                  | Insect cells  |                  |               |
| <b>Molecular Weight:</b>        | 18-24 kDa (129 aa) under reducing conditions  |                  |               |
| <b>Formulation:</b>             | Lyophilized   |                  |               |
| <b>Purity:</b>                  | > 90% as determined by SDS-PAGE, visualised by silver stain.  |                  |               |
| <b>Endotoxin Level:</b>         | < 1 EU/µg   |                  |               |
| <b>Biological Activity:</b>     | The biological activity was determined (i) by the ability to induce VEGFR-3/FLT-4 receptor phosphorylation in PAEC/VEGFR-3 cells and (ii) the VEGF-C-induced proliferation of primary human dermal lymphatic endothelial cells (HDLEC).   |                  |               |
| <b>Amino Acid Sequence:</b>     | DPTEETIKFAAAHYNTEILKSIDNEWKRTQCMPCREVCIDVGKEFGVATNTFFKPPCVSVY<br>RCGGCCNSEGLQCMNTSTSYLSKTLFEITVPLSQGPKPVTISFANHTSCRCMSKLLHHHH<br>HH   |                  |               |
| <b>Reconstitution:</b>          | <b>Centrifuge vial prior to opening.</b> Add PBS or medium to the vial to a concentration of 0.1 - 1.0 mg/mL. <b>Do not vortex.</b> After complete solubilization of the protein, it may be further diluted with other solutions containing a carrier protein such as 0.1 % BSA.  |                  |               |
| <b>Storage &amp; Stability:</b> | Lyophilized protein is stable for 1 year at -20°C to -80°C. Store reconstituted protein in working aliquots at -20°C. <b>Avoid repeated freeze-thaw cycles.</b>   |                  |               |

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