

VEGF-C, Human CellExp™, human recombinant

CATALOG #: 7231-10 10 µg

ALTERNATE NAMES: VEGFC, Flt4-L, VRP

SOURCE: HEK 293 cells (Thr 103 - Arg 227)

PURITY: ≥ 97% by SDS-PAGE gel

MOL. WEIGHT: The protein is fused with 6×His tag at the C-terminus, has a calculated MW of 15 kDa. The predicted N-terminus is Thr 103. DTT-reduced Protein migrates as 18-23 kDa due to glycosylation.

ENDOTOXIN LEVEL: <1 EU/µg by LAL method

FORM: Lyophilized

FORMULATION: Lyophilized from 0.22 µm filtered solution in PBS. Generally 5-8% Mannitol or trehalose is added as a protectant before lyophilization.

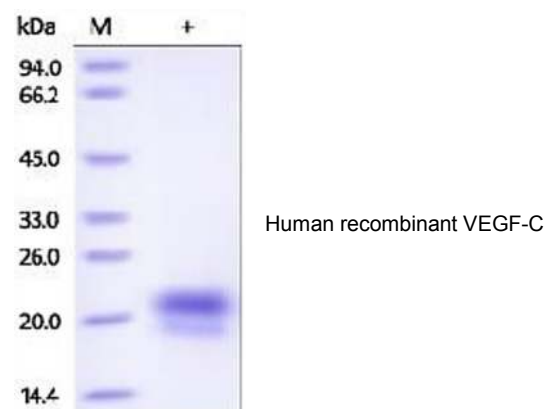
STORAGE CONDITIONS: Store at -20°C. After reconstitution, aliquot and store at -20°C and use within 3 months. Avoid repeated freezing and thawing cycles.

RECONSTITUTION: Centrifuge the vial prior to opening. Reconstitute in sterile PBS, pH 7.4 to a concentration of 50 µg/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 month. For extended storage, it is recommended to store at -20°C.

DESCRIPTION: Vascular endothelial growth factor C is also known as VEGFC, Flt4-L and VRP; 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. VEGFC 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. This secreted protein undergoes a complex proteolytic maturation, generating multiple processed forms that bind and activate VEGFR-3 receptors. Only the fully processed form can bind and activate VEGFR-2 receptors. The

structure and function of this protein is similar to those of vascular endothelial growth factor D (VEGF-D). 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. Overexpression of VEGF-C causes lymphatics to enlarge possibly facilitates metastasis.

BIOLOGICAL ACTIVITY: Measured in a cell proliferation assay using HMVEC human microvascular endothelial cells. The ED₅₀ for this effect is typically 0.15-0.7 µg/ml.



RELATED PRODUCTS:

- Human CellExp™ Human Recombinant VEGF-B (Cat # 7230-10)
- Human CellExp™ Human Recombinant VEGF 165 (Cat # 6485-10, -50)
- VEGF121, human recombinant (Cat. No. 4963-10, -50, -1000)
- VEGF165, human recombinant (Cat. No. 4363-10, -50, -1000)
- VEGF165, murine recombinant (Cat. No. 4364-10, -50, -1000)
- VEGF165, rat recombinant (Cat. No. 4365-10, -50, -1000)
- VEGF120, murine recombinant (Cat. No. 4964-10, -100, -1000)
- VEGF-B, human recombinant (Cat. No. 4642-10, -20, -1000)
- VEGF-C, human recombinant (Cat. No. 4633-10, -50, -1000)
- VEGF-C, murine recombinant (Cat. No. 4634-10, -50, -1000)
- VEGF-C, rat recombinant (Cat. No. 4635-10, -50, -1000)
- VEGF-D, human recombinant (Cat. No. 4343-10, -50, -1000)

FOR RESEARCH USE ONLY! Not to be used in humans.