

VEGFC

Recombinant Human VEGF-C (His Tag)

Catalog No.	CRH505A-His CRH505B-His CRH505C-His	Quantity:	50 µg 100 µg 1.0 mg
Alternate Names:	Vascular endothelial growth factor C, VEGF-C, Flt4 ligand, Flt4-L, Vascular endothelial growth factor-related protein, VRP		
Description:	Vascular endothelial growth factor C (VEGF-C) is a member of the VEGF family. Upon biosynthesis, VEGF-C protein is secreted as a non-covalent monomer in an anti-parallel fashion. VEGF-C protein is a dimeric glycoprotein, as a ligand for two receptors, VEGFR-3 (Flt4), and VEGFR-2. VEGF-C may function in angiogenesis of the venous and lymphatic vascular systems during embryogenesis. VEGF-C protein is over-expressed in various human cancers including breast cancer and prostate cancer. VEGF-C/VEGFR-3 axis, through different signaling pathways, plays a critical role in cancer progression by regulating different cellular functions, such as invasion, proliferation, and resistance to chemotherapy. Thus, targeting the VEGF-C/VEGFR-3 axis may be therapeutically significant for certain types of tumors.		
UniProt ID:	P49767		
Accession Number:	NP_005420.1		
Protein Construction:	A DNA sequence encoding the mature form of human VEGFC corresponding to amino acid (Thr 103-Arg 227) was expressed with a C-terminal polyhistidine tag.		
Source:	HEK293 Cells		
Formulation:	Lyophilized from sterile PBS, pH 7.4 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.		
Molecular Weight:	The recombinant mature form of human VEGFC consists of 136 amino acids and has a predicted molecular mass of 15.5 kDa. In SDS-PAGE under reducing conditions, it migrates with an apparent molecular mass of 22-24 kDa due to glycosylation.		
Purity:	> 95 % as determined by SDS-PAGE		
Endotoxin Level:	< 1.0 EU per µg of the protein as determined by the LAL method		
Biological Activity:	1. Measured by its binding ability in a functional ELISA. Scatchard analysis showed the affinity constant (Kd) of recombinant human VEGF-C bound to recombinant human VEGFR3 was 1.4 nM. 2. Measured in a cell proliferation assay using human umbilical vein endothelial cells (HUVEC). The ED50 for this effect is 0.1-0.5µg/mL.		
Predicted N-terminal:	Thr 103		



Reconstitution:

Centrifuge vial prior to opening. Add sterile distilled water to a concentration of 0.1 mg/mL and gently pipette the solution up and down the sides of the vial.

DO NOT VORTEX. Allow several minutes for complete reconstitution.

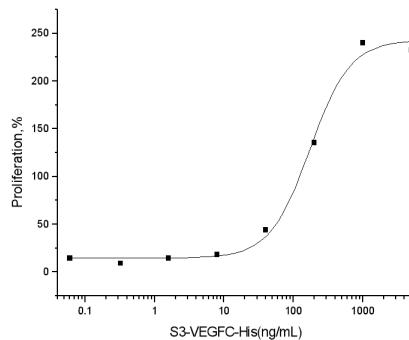
Storage & Stability:

Stable for up to 1 year from date of receipt at -20°C to -80°C

After reconstitution, store working aliquots at -20°C to -80°C.

Avoid repeated freeze-thaw cycles.

Measured in a cell proliferation assay using human umbilical vein endothelial cells (HUVEC). The ED50 for this effect is 0.1-0.5µg/mL.



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